# WEST Search History

DATE: Monday, October 28, 2002

| Set Name side by side | Query | Hit Count | Set Name result set |
|---|---|---|---|
| *DB=USPT,PGPB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ* | | | |
| L2 | Sanders-Mitchell-C$.in. | 1 | L2 |
| L1 | Sanders-Mitchel-C$.in. | 0 | L1 |

END OF SEARCH HISTORY

Inventor Names Search.

**WEST**

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**Search Results** - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 20020142384 A1

L2: Entry 1 of 1 File: PGPB Oct 3, 2002

PGPUB-DOCUMENT-NUMBER: 20020142384
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020142384 A1

TITLE: Method and device for improving protein stability and solubility

PUBLICATION-DATE: October 3, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|---|---|---|---|---|
| Sanders, Mitchell C. | Leicester | MA | US | |

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 530/350, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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| Term | Documents |
|---|---|
| SANDERS-MITCHELL-C$ | 0 |
| SANDERS-MITCHELL-C.DWPI,EPAB,USPT,PGPB. | 1 |
| SANDERS-MITCHELL-C$.IN..USPT,PGPB,EPAB,DWPI,TDBD. | 1 |
| (SANDERS-MITCHELL-C$.IN.).USPT,PGPB,EPAB,DWPI,TDBD. | 1 |

**Display Format:** - Change Format

Previous Page Next Page

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=> index patents bioscience meetings business
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
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                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         1.06       1.48

INDEX 'CAOLD, CAPLUS, CASREACT, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2,
       EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE,
       PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2,
       USPATFULL, USPAT2, WPIDS, WPINDEX, ADISALERTS, ...'
ENTERED AT 19:00:24 ON 28 OCT 2002

103 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s (alpha (w) crystallin) and (HIS-tagged or histidine or NTA)
         21   FILE CAPLUS
          5   FILE EUROPATFULL
          1   FILE IFIPAT
  18 FILES SEARCHED...
         24   FILE PCTFULL
         26   FILE USPATFULL
          1   FILE WPIDS
          1   FILE WPINDEX
          1   FILE AGRICOLA
          1   FILE BIOBUSINESS
         17   FILE BIOSIS
  37 FILES SEARCHED...
          1   FILE BIOTECHABS
          1   FILE BIOTECHDS
          3   FILE BIOTECHNO
          1   FILE CABA
          1   FILE DDFU
          2   FILE DRUGU
         11   FILE EMBASE
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          5   FILE ESBIOBASE
          4   FILE GENBANK
          1   FILE JICST-EPLUS
          1   FILE LIFESCI
         12   FILE MEDLINE
          2   FILE PASCAL
  79 FILES SEARCHED...
         16   FILE SCISEARCH
         11   FILE TOXCENTER

  25 FILES HAVE ONE OR MORE ANSWERS,  103 FILES SEARCHED IN STNINDEX

L1   QUE (ALPHA (W) CRYSTALLIN) AND (HIS-TAGGED OR HISTIDINE OR NTA)

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=> s l1
L2          26 FILE USPATFULL
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L13          3 FILE BIOTECHNO
L14          2 FILE DRUGU
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L16          1 FILE IFIPAT
L17          1 FILE WPIDS
L18          1 FILE AGRICOLA
L19          1 FILE BIOBUSINESS
L20          1 FILE BIOTECHDS
L21          1 FILE CABA
L22          1 FILE JICST-EPLUS
L23          1 FILE LIFESCI

TOTAL FOR ALL FILES
L24        167 L1

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L46          0 FILE LIFESCI

TOTAL FOR ALL FILES
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ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L47
L48          48 DUP REM L47 (3 DUPLICATES REMOVED)
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=> d l48 1-48 ibib abs

L48 ANSWER 1 OF 48 USPATFULL DUPLICATE 1
ACCESSION NUMBER: 2002:258814 USPATFULL
TITLE: Method and device for improving protein stability and solubility
INVENTOR(S): Sanders, Mitchell C., Leicester, MA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002142384 | A1 | 20021003 |
| APPLICATION INFO.: | US 2001-848780 | A1 | 20010503 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2000-201407P | 20000503 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 506
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for expressing proteins as a fusion chimera with a domain of p26 or **alpha crystallin** type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT **Vector** System just downstream of the p26 or **alpha crystallin** type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac I.sub.q). The soluble recombinant protein is purified using a fusion tag.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 2 OF 48 USPATFULL
ACCESSION NUMBER: 2002:280000 USPATFULL
TITLE: Hepatitis B virus treatment
INVENTOR(S): Mizzen, Lee A., Victoria, CANADA
Siegel, Marvin, Blue Bell, PA, UNITED STATES
Liu, Hongwei, Victoria, CANADA

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002155434 | A1 | 20021024 |
| APPLICATION INFO.: | US 2002-68059 | A1 | 20020205 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2001-266733P | 20010205 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LEE CREWS, PH.D., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 1452
AB The invention relates to HBV antigen-containing compositions that are useful in treating or preventing HBV infection. The content of the compositions can vary, as described herein, but the compositions

comprise a stress protein, or a portion (e.g., a fragment) or derivative thereof, and an HBV antigen.

L48 ANSWER 3 OF 48 USPATFULL
ACCESSION NUMBER: 2002:221323 USPATFULL
TITLE: Molecular toxicology modeling
INVENTOR(S): Mendrick, Donna L., Mount Airy, MD, UNITED STATES
Porter, Mark W., Germantown, MD, UNITED STATES
Johnson, Kory R., Bethesda, MD, UNITED STATES
Castle, Arthur L., Washington, DC, UNITED STATES
Elashoff, Michael R., Germantown, MD, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2002119462 | A1 | 20020829 | |
| APPLICATION INFO.: | US 2001-917800 | A1 | 20010731 | (9) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2000-222040P | 20000731 | (60) |
| | US 2000-244880P | 20001102 | (60) |
| | US 2001-290029P | 20010511 | (60) |
| | US 2001-290645P | 20010515 | (60) |
| | US 2001-292336P | 20010522 | (60) |
| | US 2001-295798P | 20010606 | (60) |
| | US 2001-297457P | 20010613 | (60) |
| | US 2001-298884P | 20010619 | (60) |
| | US 2001-303459P | 20010709 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
LINE COUNT: 9801
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is based on the elucidation of the global changes in gene expression and the identification of toxicity markers in tissues or cells exposed to a known toxin. The genes may be used as toxicity markers in drug screening and toxicity assays. The invention includes a database of genes characterized by toxin-induced differential expression that is designed for use with microarrays and other solid-phase probes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 4 OF 48 USPATFULL
ACCESSION NUMBER: 2002:205879 USPATFULL
TITLE: Human papilloma virus treatment
INVENTOR(S): Neefe, John R., Devon, PA, UNITED STATES
Goldstone, Stephen E., New York, NY, UNITED STATES
Winnett, Mark T., Phoenixville, PA, UNITED STATES
Siegel, Marvin, Blue Bell, PA, UNITED STATES
Boux, Leslie J., Victoria, CANADA

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2002110566 | A1 | 20020815 | |
| APPLICATION INFO.: | US 2001-891823 | A1 | 20010626 | (9) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2000-214202P | 20000626 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LEE CREWS, PH. D., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
LINE COUNT: 1257
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a method of treating a wart in a subject by administering to the subject a composition containing (1) a heat shock protein or an immunostimulatory fragment thereof, and (2) a protein of a human papilloma virus or an antigenic fragment thereof. Also disclosed is a method of treating a human papilloma virus infection in a subject infected or suspected of being infected with a human papilloma virus of a first type by administering to the subject a composition containing (1) a heat shock protein or an antigenic fragment thereof, and (2) a protein of a human papilloma virus of a second type or an antigenic fragment thereof, where the first type and second type are different.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 5 OF 48 USPATFULL
ACCESSION NUMBER: 2002:199080 USPATFULL
TITLE: Regulation of biological events using novel compounds
INVENTOR(S): Clackson, Timothy P., Arlington, MA, UNITED STATES
Gilman, Michael Z., Newton, MA, UNITED STATES
Holt, Dennis A., Schwenksville, PA, UNITED STATES
Keenan, Terence P., Cambridge, MA, UNITED STATES
Rozamus, Leonard, Bedford, MA, UNITED STATES
Yang, Wu, Princeton, NJ, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002107189 | A1 | 20020808 |
| APPLICATION INFO.: | US 2001-781804 | A1 | 20010212 (9) |

RELATED APPLN. INFO.: Division of Ser. No. US 1998-12097, filed on 22 Jan 1998, GRANTED, Pat. No. US 6187757 Continuation-in-part of Ser. No. US 1997-791044, filed on 28 Jan 1997, ABANDONED Continuation-in-part of Ser. No. US 1995-481941, filed on 7 Jun 1995, ABANDONED

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | WO 1996-US9948 | 19960607 |
| | US 1996-15502P | 19960209 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: David L. Berstein, ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street, Cambridge, MA, 02139-4234
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 5858
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Materials and methods are disclosed for regulation of biological events such as target gene transcription and growth, proliferation or differentiation of engineered cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 6 OF 48 USPATFULL
ACCESSION NUMBER: 2002:191539 USPATFULL
TITLE: Full-length human cDNAs encoding potentially secreted proteins
INVENTOR(S): Milne Edwards, Jean-Baptiste Dumas, Paris, FRANCE
Bougueleret, Lydie, Petit Lancy, SWITZERLAND
Jobert, Severin, Paris, FRANCE

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002102604 | A1 | 20020801 |
| APPLICATION INFO.: | US 2000-731872 | A1 | 20001207 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1999-169629P | 19991208 (60) |
| | US 2000-187470P | 20000306 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: John Lucas, Ph.D., J.D., Genset Corporation, 10665 Srrento Valley Road, San Diego, CA, 92121-1609
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 28061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns GENSET polynucleotides and polypeptides. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression **vectors**. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 7 OF 48 USPATFULL
ACCESSION NUMBER: 2002:178550 USPATFULL
TITLE: Nucleic acid fragments and polypeptide fragments derived from M. tuberculosis
INVENTOR(S): Andersen, Peter, Bronshoj, DENMARK
Nielsen, Rikke, Frederiksberg C, DENMARK
Oettinger, Thomas, Hellerup, DENMARK
Rasmussen, Peter Birk, Kobenhaven O, DENMARK
Rosenkrands, Ida, Kobenhaven O, DENMARK
Weldingh, Karin, Kobenhaven N, DENMARK
Florio, Walter, Frederiksberg C, DENMARK
PATENT ASSIGNEE(S): STATENS SERUM INSTITUT (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002094336 | A1 | 20020718 |
| APPLICATION INFO.: | US 2001-791171 | A1 | 20010220 (9) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1998-50739, filed on 30 Mar 1998, PENDING | | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DK 1997-376 | 19970402 |
| | DK 1997-1277 | 19971110 |
| | US 1997-44624P | 19970418 (60) |
| | US 1998-70488P | 19980105 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FROMMER LAWRENCE & HAUG LLP, 745 FIFTH AVENUE, NEW YORK, NY, 10151
NUMBER OF CLAIMS: 53
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 6134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is based on the identification and

characterization of a number of M. tuberculosis derived novel proteins and protein fragments (SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16, 17-23, 42, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72-86, 88, 90, 92, 94, 141, 143, 145, 147, 149, 151, 153, and 168-171). The invention is directed to the polypeptides and immunologically active fragments thereof, the genes encoding them, immunological compositions such as vaccines and skin test reagents containing the polypeptides. Another part of the invention is based on the surprising discovery that fusions between ESAT-6 and MPT59 are superior immunogens compared to each of the unfused proteins, respectively.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 8 OF 48 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 2002:157089 USPATFULL |
| TITLE: | Retinoid pathway assays, and compositions therefrom |
| INVENTOR(S): | Kamb, Carl Alexander, Salt Lake City, UT, UNITED STATES<br>Richards, Burt Timothy, Midway, UT, UNITED STATES<br>Karpilow, Jon, Boulder, CO, UNITED STATES |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002081688 | A1 | 20020627 |
| APPLICATION INFO.: | US 2001-990747 | A1 | 20011116 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-812994, filed on 4 Mar 1997, GRANTED, Pat. No. US 5955275

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2000-249468P | 20001117 (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | Joseph A. Williams, Jr., MARSHALL, GERSTEIN, MURRAY & BORUN, 6300 Sears Tower, 233 South Wacker Drive, Chicago, IL, 60606-6402 |
| NUMBER OF CLAIMS: | 110 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 33 Drawing Page(s) |
| LINE COUNT: | 3714 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for assaying a cellular pathway, and more particularly a retinoic acid-related pathway, are disclosed. The assays of the invention utilize particular host cells with desired retinoic acid pathway elements, and results in the identification of biologically active phenotypic probes and cellular targets and fragments, variants and mimetics thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 9 OF 48 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 2002:8197 USPATFULL |
| TITLE: | Synthetic transcriptional modulators and uses thereof |
| INVENTOR(S): | Verdine, Gregory L., Lexington, MA, UNITED STATES<br>Nyanguile, Origene, Gaithersburg, MD, UNITED STATES |
| PATENT ASSIGNEE(S): | President and Fellows of Harvard College (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002004195 | A1 | 20020110 |
| APPLICATION INFO.: | US 2000-751309 | A1 | 20001229 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-208057, filed on 9 Dec 1998, GRANTED, Pat. No. US 6183965 Continuation-in-part of Ser. No. US 1997-987912, filed on 9 Dec 1997, GRANTED, Pat. No. US 6153383

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY, HOAG & ELIOT, LLP, PATENT GROUP, ONE POST OFFICE SQUARE, BOSTON, MA, 02109
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 3196
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 10 OF 48 USPATFULL
ACCESSION NUMBER: 2002:254057 USPATFULL
TITLE: Compounds and methods for diagnosis of tuberculosis
INVENTOR(S): Reed, Steven G., Bellevue, WA, United States
Skeiky, Yasir A. W., Seattle, WA, United States
Dillon, Davin C., Redmond, WA, United States
Campos-Neto, Antonio, Bainbridge Island, WA, United States
Houghton, Raymond, Bothell, WA, United States
Vedvick, Thomas S., Federal Way, WA, United States
Twardzik, Daniel R., Bainbridge Island, WA, United States
Lodes, Michael J., Seattle, WA, United States
Hendrickson, Ronald C., Seattle, WA, United States
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6458366 | B1 | 20021001 |
| APPLICATION INFO.: | US 1998-72596 | | 19980505 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-24753, filed on 18 Feb 1998, now abandoned Continuation-in-part of Ser. No. US 1997-942341, filed on 1 Oct 1997, now abandoned Continuation-in-part of Ser. No. US 1997-818111, filed on 13 Mar 1997 Continuation-in-part of Ser. No. US 1996-729622, filed on 11 Oct 1996, now abandoned Continuation-in-part of Ser. No. US 1996-680574, filed on 12 Jul 1996, now abandoned Continuation-in-part of Ser. No. US 1996-658800, filed on 5 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1996-620280, filed on 22 Mar 1996, now abandoned Continuation-in-part of Ser. No. US 1995-532136, filed on 22 Sep 1995, now abandoned Continuation of Ser. No. US 1995-523435, filed on 1 Sep 1995, now abandoned

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | WO 1996-US14675 | 19960830 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Swartz, Rodney P.
LEGAL REPRESENTATIVE: Townsend & Townsend & Crew, LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 23 Drawing Figure(s); 19 Drawing Page(s)

LINE COUNT: 8789
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds and methods for diagnosing tuberculosis are disclosed. The compounds provided include polypeptides that contain at least one antigenic portion of one or more M. tuberculosis proteins, and DNA sequences encoding such polypeptides. Diagnostic kits containing such polypeptides or DNA sequences and a suitable detection reagent may be used for the detection of M. tuberculosis infection in patients and biological samples. Antibodies directed against such polypeptides are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 11 OF 48 USPATFULL
ACCESSION NUMBER: 2002:95352 USPATFULL
TITLE: Composition and method for the prevention and treatment of oxidative damage in ocular tissues
INVENTOR(S): Lou, Marjorie F., Lincoln, NE, United States
Raghavachari, Nalini, Lincoln, NE, United States
Qiao, Fengyu, Lincoln, NE, United States
PATENT ASSIGNEE(S): Board of Regents University of Nebraska-Lincoln, Lincoln, NE, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6379664 | B1 | 20020430 |
| APPLICATION INFO.: | US 1998-162564 | | 19980929 (9) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Prouty, Rebecca E.
ASSISTANT EXAMINER: Hutson, Richard
LEGAL REPRESENTATIVE: Suiter & Associates PC, Rand, Scott C., Breen, III, William J.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1710
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Thioltransferase and derivatives thereof are provided. Methods of treating or preventing cataract formation comprising administering thioltransferase or a derivative thereof are also provided. Thioltransferase or derivatives thereof are also useful for treating or preventing diseases resulting from or associated with oxidative stress. Human lens thioltransferase and a DNA sequence encoding the same are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 12 OF 48 USPATFULL
ACCESSION NUMBER: 2002:39663 USPATFULL
TITLE: Compositions and methods for the prevention and treatment of M. tuberculosis infection
INVENTOR(S): Reed, Steven G., Bellevue, WA, United States
Skeiky, Yasir A. W., Seattle, WA, United States
Dillon, Davin C., Redmond, WA, United States
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6350456 | B1 | 20020226 |
| APPLICATION INFO.: | US 1998-56556 | | 19980407 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-25197, filed on 18 Feb 1998, now abandoned Continuation-in-part of Ser. No. US 1997-942578, filed on 1 Oct 1997, now

abandoned Continuation-in-part of Ser. No. US 1997-818112, filed on 13 Mar 1997
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Swartz, Rodney P
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 23 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 6417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for treatment and vaccination against tuberculosis are disclosed. In one aspect the compositions provided include at least two polypeptides that contain an immunogenic portion of a M. tuberculosis antigen or at least two DNA molecules encoding such polypeptides. In a second aspect, the compositions provided include a fusion protein comprising at least two polypeptides that contain an immunogenic portion of a M. tuberculosis antigen. Such compositions may be formulated into vaccines and/or pharmaceutical compositions for immunization against M. tuberculosis infection, or may be used for the diagnosis of tuberculosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 13 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002081731 PCTFULL ED 20021028 EW 200242
TITLE (ENGLISH): NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
TITLE (FRENCH): NOUVEAUX ACIDES NUCLEIQUES ET POLYPEPTIDES
INVENTOR(S): TANG, Tom, Y.; LIU, Chenghua; ZHOU, Ping; ASUNDI, Vinod; ZHANG, Jie; ZHAO, Qing, A.; REN, Feiyan; XUE, Aidong, J.; YANG, Yonghong; WEHRMAN, Tom; WANG, Jian-Rui; WANG, Dunrui; DRMANAC, Radoje, T.
PATENT ASSIGNEE(S): HYSEQ, INC., for all designates States except US; GOODRICH, Ryle, W., for US only; TANG, Tom, Y., for US only; LIU, Chenghua, for US only; ZHOU, Ping, for US only; ASUNDI, Vinod, for US only; ZHANG, Jie, for US only; ZHAO, Qing, A., for US only; REN, Feiyan, for US only; XUE, Aidong, J., for US only; YANG, Yonghong, for US only; WEHRMAN, Tom, for US only; WANG, Jian-Rui, for US only; WANG, Dunrui, for US only; DRMANAC, Radoje, T., for US only
AGENT: HSI, Petrina, S.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002081731 | A2 | 20021017 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

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|---|---|---|---|
| APPLICATION INFO.: | WO 2002-US1222 | A | 20020129 |
| PRIORITY INFO.: | US 2001-09/774,528 | | 20010130 |

ABEN The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.
ABFR La presente invention concerne de nouveaux acides nucleiques, de nouvelles sequences polypeptidiques codees par ces acides nucleiques, et leurs utilisations.

L48 ANSWER 14 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002067982 PCTFULL ED 20020916 EW 200236
TITLE (ENGLISH): METHODS AND COMPOSITIONS FOR THERAPEUTIC INTERVENTION IN INFECTIOUS DISEASE
TITLE (FRENCH): METHODES ET COMPOSITIONS D'INTERVENTION THERAPEUTIQUE DANS LE CADRE D'UNE MALADIE INFECTIEUSE
INVENTOR(S): YOUNG, Douglas, Brownlie; STEWART, Graham, Roger; O'GAORA, Peadar, Caoimhin Eoin
PATENT ASSIGNEE(S): SEQUELLA, INC., for all designates States except US; YOUNG, Douglas, Brownlie; STEWART, Graham, Roger; O'GAORA, Peadar, Caoimhin Eoin
AGENT: PRATT, John
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002067982 | A2 | 20020906 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

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| APPLICATION INFO.: | WO 2002-US5038 | A | 20020220 |
| PRIORITY INFO.: | US 2001-60/269,801 | | 20010220 |
| | US 2001-60/294,170 | | 20010529 |

ABEN Methods and compositions for the treatment and prevention of infectious diseases are provided. In particular, efficient vaccines comprising genetically modified pathogens are provided. The vaccines generally comprise mycobacterial mutants having modified protein production capabilities. In one embodiment, the mutants overexpress heat shock protein. In a specific embodiment, the mycobacterial mutant overexpresses heat shock proteins 60 and/or 70. Also provided are modified BCG vaccines capable of overexpressing heat shock proteins 60 and/or 70.

ABFR Cette invention concerne des methodes et des compositions destinees au traitement et a la prevention de maladies infectieuses. Notamment, l'invention a trait a des vaccins efficaces renfermant des agents pathogenes genetiquement modifies. Les vaccins contiennent generalement des mutants de mycobacteriose presentant des capacites de production de proteines modifiees. Selon un mode de realisation, les mutants surexpriment la proteine du stress. Selon un mode de realisation specifique, le mutant de mycobacteriose surexprime les proteines du stress 60 et/ou 70. Ladite invention concerne aussi des vaccins du BCG modifies capables de surexprimer les proteines du stress 60 et/ou 70.

L48 ANSWER 15 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002062959 PCTFULL ED 20020827 EW 200233
TITLE (ENGLISH): HEPATITIS B VIRUS TREATMENT
TITLE (FRENCH): TRAITEMENT DU VIRUS DE L'HEPATITE B
INVENTOR(S): MIZZEN, Lee; LIU, Hongwei; SIEGEL, Marvin
PATENT ASSIGNEE(S): STRESSGEN BIOTECHNOLOGIES CORP., for all designates States except US; MIZZEN, Lee, for US only; LIU, Hongwei, for US only; SIEGEL, Marvin, for US only
AGENT: FRASER, Janis, K.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|

| | | |
|---|---|---|
| | WO 2002062959 | A2 20020815 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG | |
| APPLICATION INFO.: | WO 2002-US3460 | A 20020205 |
| PRIORITY INFO.: | US 2001-60/266,733 | 20010205 |

ABEN The invention relates to HBV antigen-containing compositions that are useful in treating or preventing HBV infection. The content of the compositions can vary, as described herein, but the compositions comprise a stress protein, or a portion (e.g., a fragment) or derivative thereof, and an HBV antigen.

ABFR L'invention concerne des compositions contenant un antigene du virus de l'hepatite B (HBV) utilisees pour traiter ou prevenir une infection induite par le HBV. Le contenu des compositions peut varier, et ces compositions comprennent une proteine de stress, ou une partie (par exemple, un fragment) ou un derive de celle-ci, et un antigene contre le HBV.

L48 ANSWER 16 OF 48 PCTFULL COPYRIGHT 2002 Univentio

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|---|---|
| ACCESSION NUMBER: | 2002054073 PCTFULL ED 20020723 EW 200228 |
| TITLE (ENGLISH): | LATENT HUMAN TUBERCULOSIS MODEL, DIAGNOSTIC ANTIGENS, AND METHODS OF USE |
| TITLE (FRENCH): | MODELE DE TUBERCULOSE HUMAINE LATENTE, ANTIGENES DIAGNOSTIQUES ET METHODES D'UTILISATION ASSOCIEES |
| INVENTOR(S): | QUINN, Frederick, D.; BIRKNESS, Kristin, A.; DESLAURIERS, Manon; KING, Peter; BEALL, David, S. |
| PATENT ASSIGNEE(S): | THE GOVERNEMENT OF THE UNITED STATES, as represented by THE SECRETARY, DEPARTMENT OF HEALTH & HUMAN SERVICES, for all designates States except US; QUINN, Frederick, D., for US only; BIRKNESS, Kristin, A., for US only; DESLAURIERS, Manon, for US only; KING, Peter, for US only; BEALL, David, S., for US only |
| AGENT: | HARDING, Tanya, M. |
| LANGUAGE OF FILING: | English |
| LANGUAGE OF PUBL.: | English |
| DOCUMENT TYPE: | Patent |

PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002054073 | A2 | 20020711 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2002-US309 | A | 20020107 |
| PRIORITY INFO.: | US 2001-60/260,348 | | 20010108 |
| | US 2001-60/311,235 | | 20010809 |

ABEN Provided herein is an in vitro granuloma model and methods of its use. Methods of detecting and/or diagnosing latent tuberculosis in a subject are also provided, as are latency-specific antigens (and antibodies thereto), such as **α-crystallin**, and methods of identifying and using such molecules. Also provided are immunostimulatory compositions, for instance for use in eliciting an immune response in a subject, such as an immune response to a latent

tuberculosis infection. Kits for carrying out the provided methods are also described.

ABFR L'invention concerne un modele de granuloma in vitro et ses methodes d'utilisation. L'invention concerne egalement des methodes de detection et/ou de diagnostic de la tuberculose latente chez un sujet, des antigenes specifiques de latence (et les anticorps de ceux-ci), par exemple de type α-cristallin, et des methodes d'identification et d'utilisation de ces molecules. Par ailleurs, l'invention concerne des composition immunostimulantes, utilisees notamment pour provoquer une reponse immunitaire chez un sujet, par exemple une reponse immunitaire vis a vis d'une infection tuberculeuse latente. Enfin, l'invention concerne des kits d'application de ces methodes.

L48 ANSWER 17 OF 48 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 2002040719 PCTFULL ED 20020610 EW 200221

TITLE (ENGLISH): RETINOID PATHWAY ASSAYS, AND COMPOSITIONS THEREFROM

TITLE (FRENCH): DOSAGES DE VOIES DU RETINOIDE, ET COMPOSITIONS CORRESPONDANTES

INVENTOR(S): KAMB, Carl, Alexander; RICHARDS, Burt, Timothy; KARPILOW, Jon

PATENT ASSIGNEE(S): DELTAGEN PROTEOMICS, INC., for all designates States except US; KAMB, Carl, Alexander, for US only; RICHARDS, Burt, Timothy, for US only; KARPILOW, Jon, for US only

AGENT: WILLIAMS, Joseph, A., Jr.

LANGUAGE OF FILING: English

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002040719 | A2 | 20020523 |

DESIGNATED STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US44039 A 20011117

PRIORITY INFO.: US 2000-60/249,468 20001117

ABEN Methods for assaying a cellular pathway, and more particularly a retinoic acid-related pathway, are disclosed. The assays of the invention utilize particular host cells with desired retinoic acid pathway elements, and results in the identification of bilogically active phenotypic probes and cellular targets and fragments, variants and mimetics thereof.

ABFR L'invention concerne des methodes de dosage d'une voie cellulaire, et plus specifiquement, d'une voie afferente a l'acide retinoique. Les dosages de cette invention utilisent des cellules hotes specifiques avec des elements de voies d'acide retinoique, ainsi que des resultats d'identification des sonde phenotypiques actives biologiquement et de fragments et cibles cellulaires, des variants et des substances mimetiques correspondantes.

L48 ANSWER 18 OF 48 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 2002010433 PCTFULL ED 20020814

TITLE (ENGLISH): A DEVICE FOR DETECTING BACTERIAL CONTAMINATION AND METHOD OF USE

TITLE (FRENCH): DISPOSITIF DE DETECTION DE CONTAMINATION BACTERIENNE ET PROCEDE D'UTILISATION

INVENTOR(S): SANDERS, Mitchell, C.
PATENT ASSIGNEE(S): EXPRESSIVE CONSTRUCTS, INC.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002010433 | A2 | 20020207 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US14613 A 20010503
PRIORITY INFO.: US 2000-60/201,405 20000503

ABEN A device and method for detecting the presence or absence of a prokaryotic microorganism are provided, comprising the steps of identifying a protein, such as a microbial-specific protease that characterizes the presence of a specific prokaryotic microbe and thereby provides a marker for that microbe; detecting the protease that is a marker for the presence of a specific prokaryotic microbe by cleaving a substance when the protease is present; and signaling the presence of that protease when cleavage has occurred. More specifically, the method comprises identifying at least one outer membrane protein or a secreted protein that is unique to a particular microbial pathogen such as for example Listeria monocytogenes and that is substrate specific.

ABFR L'invention concerne un dispositif et un procede de detection de la presence ou de l'absence de micro-organisme procaryote, le procede consistant a identifier une proteine, telle qu'une protease microbienne qui caracterise la presence d'un microbe procaryote specifique et fournit ainsi un marqueur pour ce microbe, a detecter la protease marqueur revelant la presence d'un microbe procaryote specifique par clivage d'une substance lorsque la protease est presente, et a signaler la presence de cette protease lorsque le clivage est realise. Le procede consiste, plus specifiquement, a identifier au moins une proteine de membrane exterieure ou une proteine secretee, unique d'un pathogene microbien particulier tel que, par exemple, Listeria monocytogenes et qui presente une specificite de substrat.

L48 ANSWER 19 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002000242 PCTFULL ED 20020814
TITLE (ENGLISH): HUMAN PAPILLOMA VIRUS TREATMENT
TITLE (FRENCH): TRAITEMENT DES INFECTIONS PAR LE PAPILLOMAVIRUS
INVENTOR(S): NEEFE, John; GOLDSTONE, Stephen; WINNETT, Mark; SIEGEL, Marvin
PATENT ASSIGNEE(S): STESSGEN BIOTECHNOLOGIES CORPORATION; NEEFE, John; GOLDSTONE, Stephen; WINNETT, Mark; SIEGEL, Marvin
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002000242 | A2 | 20020103 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US20240 A 20010626
PRIORITY INFO.: US 2000-60/214,202 20000626

ABEN Disclosed is a method of treating a wart in a subject by administering

to the subject a composition containing (1) a heat shock protein or an immunostimulatory fragment thereof, and (2) a protein of a human papilloma virus or an antigenic fragment thereof. Also disclosed is a method of treating a human papilloma virus infection in a subject infected or suspected of being infected with a human papilloma virus of a first type by administering to the subject a composition containing (1) a heat shock protein or an antigenic fragment thereof, and (2) a protein of a human papilloma virus of a second type or an antigenic fragment thereof, where the first type and second type are different.

ABFR L'invention se rapporte a une methode de traitement d'une verrue qui consiste a administrer au sujet presentant ladite verrue une composition contenant (1) une proteine de stress ou un fragment immunostimulateur d'une telle proteine, et (2) une proteine d'un papillomavirus ou un fragment antigenique dudit virus. L'invention se rapporte egalement a une methode de traitement d'une infection par papillomavirus chez un sujet infecte ou susceptible d'etre infecte par un papillomavirus d'un premier type, ledit procede consistant a administrer au sujet en question une composition contenant une proteine de stress ou un fragment antigenique d'une telle proteine et (2) une proteine d'un papillomavirus d'un second type ou un fragment antigenique d'une telle proteine, lesdits premier et second type de papillomavirus etant differents.

L48 ANSWER 20 OF 48 PCTFULL COPYRIGHT 2002 UniventioDUPLICATE 2
ACCESSION NUMBER: 2001083804 PCTFULL ED 20020826
TITLE (ENGLISH): A METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND SOLUBILITY
TITLE (FRENCH): METHODE ET DISPOSITIF POUR AMELIORER LA STABILITE ET LA SOLUBILITE DE PROTEINES
INVENTOR(S): SANDERS, Mitchell, C.
PATENT ASSIGNEE(S): EXPRESSIVE CONSTRUCTS, INC.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001083804 | A2 | 20011108 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2001-US14692 | A | 20010503 |
| PRIORITY INFO.: | US 2000-60/201,407 | | 20000503 |

ABEN A method for expressing proteins as a fusion chimera with a domain of p26 or **alpha crystallin** type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. Coli is provided. Genes of interest are cloned into the multiple cloning site of the pROTECT **Vector** System just downstream of the p26 or **alpha crystallin** type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1mMIPTG that overcomes the lac repression (lac Iq). The soluble recombinant protein is purified using a fusion tag.

ABFR L'invention concerne une methode servant a exprimer des proteines en tant que chimere de fusion presentant un domaine proteique de type p26 ou **alpha-crystallin**, destinee a ameliorer la stabilite et la solubilite des proteines lorsqu'elles sont exprimees excessivement dans des bacteries telles que E. Coli. Des genes d'interet sont clones dans le site de clonage multiple du systeme vectorette pROTECT juste en aval de la proteine de type p26 ou **alpha-crystallin** et d'un site de clivage de thrombine. L'expression proteique est effectuee par un puissant promoteur bacterien (TAC). Cette expression est induite par l'addition de 1mMIPTG qui

surmonte la repression de lac (lac Iq). La proteine recombinante soluble est purifiee au moyen d'un fragment de fusion.

L48 ANSWER 21 OF 48 USPATFULL

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 2001:220852 USPATFULL | | |
| TITLE: | Chimeric DNA-binding proteins | | |
| INVENTOR(S): | Pomerantz, Joel L., Cambridge, MA, United States<br>Sharp, Phillip A., Newton, MA, United States<br>Pabo, Carl O., Newton, MA, United States | | |
| PATENT ASSIGNEE(S): | Massachusetts Institute of Technology, Cambridge, MA, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 6326166 | B1 | 20011204 |
| | WO 9620951 | | 19960711 |
| APPLICATION INFO.: | US 1998-973131 | | 19980316 (8) |
| | WO 1995-US16982 | | 19951229 |
| | | | 19980316 PCT 371 date |
| | | | 19980316 PCT 102(e) date |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | GRANTED | | |
| PRIMARY EXAMINER: | Martinell, James | | |
| LEGAL REPRESENTATIVE: | Vincent, Matthew P.Ropes & Gray, LLP | | |
| NUMBER OF CLAIMS: | 60 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 12 Drawing Figure(s); 7 Drawing Page(s) | | |
| LINE COUNT: | 2890 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Chineric proteins containing composite DNA-binding regions are disclosed together with DNA constructs encoding them, compositions containing them and applications in which they are useful.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 22 OF 48 USPATFULL

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 2001:185087 USPATFULL | | |
| TITLE: | Heterologous transcription factors | | |
| INVENTOR(S): | Gilman, Michael Z., Newton, MA, United States<br>Natesan, Sridaran, Chestnut Hill, MA, United States | | |
| PATENT ASSIGNEE(S): | ARIAD Gene Therapeutics, Inc., Cambridge, MA, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 6306649 | B1 | 20011023 |
| APPLICATION INFO.: | US 1996-672213 | | 19960627 (8) |
| | NUMBER | | DATE |
| PRIORITY INFORMATION: | US 1995-553P | | 19950627 (60) |
| | US 1995-19614P | | 19951229 (60) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | GRANTED | | |
| PRIMARY EXAMINER: | Martin, Jill D. | | |
| LEGAL REPRESENTATIVE: | Berstein, David L. | | |
| NUMBER OF CLAIMS: | 2 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 7 Drawing Page(s) | | |
| LINE COUNT: | 2484 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides novel materials and methods involving the heterologous expression of transcription factors which are useful for effecting transcription of target genes in genetically engineered cells or organisms containing them. Target gene constructs and other materials

useful for practicing the invention are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 23 OF 48 USPATFULL
ACCESSION NUMBER: 2001:22203 USPATFULL
TITLE: Regulation of biological events using novel compounds
INVENTOR(S): Clackson, Timothy P., Cambridge, MA, United States
Gilman, Michael Z., Newton, MA, United States
Holt, Dennis A., Royersford, PA, United States
Keenan, Terence P., Cambridge, MA, United States
Rozamus, Leonard, Bedford, MA, United States
Yang, Wu, Plainsboro, NJ, United States
PATENT ASSIGNEE(S): ARIAD Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6187757 | B1 | 20010213 |
| APPLICATION INFO.: | US 1998-12097 | | 19980122 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-791044, filed on 28 Jan 1997 Continuation-in-part of Ser. No. US 1995-481941, filed on 7 Jun 1995, now abandoned Continuation-in-part of Ser. No. WO 1996-US9948, filed on 7 Jun 1996
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartzman, Robert A.
LEGAL REPRESENTATIVE: Berstein, David L.
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 5678
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Materials and methods are disclosed for regulation of biological events such as target gene transcription and growth, proliferation or differentiation of engineered cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 24 OF 48 USPATFULL
ACCESSION NUMBER: 2001:18213 USPATFULL
TITLE: Synthetic transcriptional modulators and uses thereof
INVENTOR(S): Verdine, Gregory L., Lexington, MA, United States
Nyanguile, Origene, Gaithersburg, MD, United States
PATENT ASSIGNEE(S): President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6183965 | B1 | 20010206 |
| APPLICATION INFO.: | US 1998-208057 | | 19981209 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-987912, filed on 9 Dec 1997
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartzman, Robert A.
LEGAL REPRESENTATIVE: Foley, Hoag & Eliot, LLP, Clauss, Isabelle M., Vincent, Matthew P.
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 3213
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel synthetic transcriptional modulators having at least one selected

ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 25 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2001079274 PCTFULL ED 20020826
TITLE (ENGLISH): M. TUBERCULOSIS ANTIGENS
TITLE (FRENCH): ANTIGENES DE LA TUBERCULOSE
INVENTOR(S): AGGER, Else, Marie; ANDERSEN, Peter; OKKELS, Li, Mei, Meng; WELDINGH, Karin
PATENT ASSIGNEE(S): STATENS SERUM INSTITUT; AGGER, Else, Marie; ANDERSEN, Peter; OKKELS, Li, Mei, Meng; WELDINGH, Karin
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001079274 | A2 | 20011025 |

DESIGNATED STATES: AE AG AL AM AT AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ CZ DE DE DK DK DM DZ EE EE ES FI FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

| | | | |
|---|---|---|---|
| APPLICATION INFO.: | WO 2001-DK276 | A | 20010419 |
| PRIORITY INFO.: | DK 2000-PA 2000 00666 | | 20000419 |
| | DK 2001-PA 2001 00283 | | 20010221 |

ABEN The present invention is based on the identification and characterization of a number of novel M. tuberculosis derived proteins and protein fragments. The invention is directed to the polypeptides and immunologically active fragments thereof, the genes encoding them, immunological compositions such as vaccines and skin test reagents containing the polypeptides.

ABFR La presente invention concerne l'identification et la caracterisation de plusieurs nouvelles proteines et nouveaux fragments de proteines derivees de M. tuberculosis. L'invention se rapporte aux polypeptides et aux fragments immunologiquement actifs de ceux-ci, aux genes les codant, a des compositions immunologiques telles que des vaccins et a des reactifs pour tests cutanes contenant les polypeptides de l'invention.

L48 ANSWER 26 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2001057190 PCTFULL ED 20020827
TITLE (ENGLISH): NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
TITLE (FRENCH): ACIDES NUCLEIQUES ET POLYPEPTIDES
INVENTOR(S): TANG, Y., Tom; LIU, Chenghua; DRMANAC, Radoje, T.; ASUNDI, Vinod; ZHOU, Ping; XU, Chongjun; CAO, Yicheng; MA, Yunquing; ZHAO, Qing, A.; WANG, Dunrui; WANG, Jian-Rui; ZHANG, Jie; REN, Feiyan; CHEN, Rui-hong; WANG, Zhi, Wei; XUE, Aidong, J.; YANG, Yonghong; WEJHRMAN, Tom; GOODRICH, Ryle
PATENT ASSIGNEE(S): HYSEQ, INC.; TANG, Y., Tom; LIU, Chenghua; DRMANAC, Radoje, T.; ASUNDI, Vinod; ZHOU, Ping; XU, Chongjun; CAO, Yicheng; MA, Yunquing; ZHAO, Qing, A.; WANG, Dunrui; WANG, Jian-Rui; ZHANG, Jie; REN, Feiyan; CHEN, Rui-hong; WANG, Zhi, Wei; XUE, Aidong, J.; YANG, Yonghong; WEJHRMAN, Tom; GOODRICH, Ryle
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001057190 | A2 | 20010809 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2001-US4098 | A | 20010205 |
| PRIORITY INFO.: | US 2000-09/496,914 | | 20000203 |
| | US 2000-09/560,875 | | 20000427 |
| | US 2000-09/598,075 | | 20000620 |
| | US 2000-09/620,325 | | 20000719 |
| | US 2000-09/654,936 | | 20000901 |
| | US 2000-09/663,561 | | 20000915 |
| | US 2000-09/693,325 | | 20001020 |
| | US 2000-09/728,422 | | 20001130 |

ABEN The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.

ABFR L'invention concerne des acides nucleiques, des sequences polypeptidiques codees par ces acides nucleiques et leurs utilisations correspondantes.

L48 ANSWER 27 OF 48 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 2001053312 PCTFULL ED 20020827

TITLE (ENGLISH): NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

TITLE (FRENCH): NOUVEAUX ACIDES NUCLEIQUES ET POLYPEPTIDES

INVENTOR(S): TANG, Y., Tom; LIU, Chenghua; ASUNDI, Vinod; CHEN, Rui-hong; MA, Yunqing; QIAN, Xiaohong, B.; REN, Feiyan; WANG, Dunrui; WANG, Jian-Rui; WANG, Zhiwei; WEHRMAN, Tom; XU, Chongjun; XUE, Aidong, J.; YANG, Yonghong; ZHANG, Jie; ZHAO, Qing, A.; ZHOU, Ping; GOODRICH, Ryle; DRMANAC, Radoje, T.

PATENT ASSIGNEE(S): HYSEQ, INC.; TANG, Y., Tom; LIU, Chenghua; ASUNDI, Vinod; CHEN, Rui-hong; MA, Yunqing; QIAN, Xiaohong, B.; REN, Feiyan; WANG, Dunrui; WANG, Jian-Rui; WANG, Zhiwei; WEHRMAN, Tom; XU, Chongjun; XUE, Aidong, J.; YANG, Yonghong; ZHANG, Jie; ZHAO, Qing, A.; ZHOU, Ping; GOODRICH, Ryle; DRMANAC, Radoje, T.

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001053312 | A1 | 20010726 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2000-US34263 | A | 20001226 |
| PRIORITY INFO.: | US 1999-09/471,275 | | 19991223 |
| | US 2000-09/488,725 | | 20000121 |
| | US 2000-09/552,317 | | 20000425 |
| | US 2000-09/598,042 | | 20000709 |
| | US 2000-09/620,312 | | 20000719 |
| | US 2000-09/653,450 | | 20000803 |
| | US 2000-09/662,191 | | 20000914 |
| | US 2000-09/693,036 | | 20001019 |
| | US 2000-09/727,344 | | 20001129 |

ABEN The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.
ABFR La presente invention se rapporte a de nouveaux acides nucleiques et a de nouvelles sequences polypeptidiques codees par lesdits acides nucleiques, ainsi qu'a leur utilisation.

L48 ANSWER 28 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2001014387 PCTFULL ED 20020828
TITLE (ENGLISH): 28-EPIRAPALOGS
TITLE (FRENCH): ANALOGUES D'EPIRAPAMYCINE-28
INVENTOR(S): YANG, Wu; DIGITS, Cheryl, A.; ROZAMUS, Leonard; HOLT, Dennis, A.
PATENT ASSIGNEE(S): ARIAD GENE THERAPEUTICS, INC.; YANG, Wu; DIGITS, Cheryl, A.; ROZAMUS, Leonard; HOLT, Dennis, A.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001014387 | A1 | 20010301 |
| DESIGNATED STATES | AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE | | |
| APPLICATION INFO.: | WO 2000-US23334 | A | 20000824 |
| PRIORITY INFO.: | US 1999-60/150,447 | | 19990824 |

ABEN Methods and materials involving 28-epirapamycin analogs are disclosed.
ABFR

L48 ANSWER 29 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2001012659 PCTFULL ED 20020828
TITLE (ENGLISH): HUMAN DNA SEQUENCES
TITLE (FRENCH): SEQUENCE D'ADN HUMAIN
INVENTOR(S): WIEMANN, Stefan
PATENT ASSIGNEE(S): GERMAN HUMAN GENOME PROJECT; WIEMANN, Stefan
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001012659 | A2 | 20010222 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2000-IB1496 | A | 20000818 |
| PRIORITY INFO.: | US 1999-60/149,499 | | 19990818 |
| | US 1999-60/156,503 | | 19990928 |

ABEN Novel human cDNA sequence of a clones, the encoded protein sequence of a clones, antibodies and variants thereof, are provided. The disclosed sequence of a clones find application in a number of ways, including use in profiling assays. In this regard, various assemblages of nucleic acids or proteins are provided that are useful in providing large arrays of human material for implementing large-scale screening strategies. The disclosed sequence of a clones may also be used in formulating medicaments, treating various disorders and in certain diagnostic applications.
ABFR

L48 ANSWER 30 OF 48 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1130094 EUROPATFULL EW 200136 FS OS
TITLE: Primers for synthesizing full length cDNA clones and their use.
Primer zur Synthese von vollstaendigen cDNA Klonen und ihre Verwendung.
Amorces pour la synthese de cADN de pleine longueur et leur utilisation.
INVENTOR(S): Ota, Toshio, 1-2-7-105, Tsujido Shinmachi, Fujisawa-shi, Kanagawa 251-0042, JP;
Nishikawa, Tetsuo, 27-3-403, Hikawa-cho, Itabashi-ku, Tokyo 173-0013, JP;
Isogai, Takao, 511-12, Ohmuro, Ami-machi, Inashiki-gun, Ibaraki 300-0303, JP;
Hayashi, Koji, 1-9-446, Yushudai Nishi, Ichihara-shi, Chiba 299-0125, JP;
Ishii, Shizuko, 4508-19-202, Yana, Kisarazu-shi, Chiba 292-0812, JP;
Kawai, Yuri, 4508-19-201, Yana, Kisarazu-shi, Chiba 292-0812, JP;
Wakamatsu, Ai, 1473-4-202, Takayanagi, Kisarazu-shi, Chiba 292-0014, JP;
Sugiyama, Tomoyasu, 2-6-23-102, Kiyomidai, Kisarazu-shi, Chiba 292-0045, JP;
Nagai, Keiichi, 3-44-14-9-204, Sakuragaoka, Higashiyamato-shi, Tokyo 207-0022, JP;
Kojima, Shinichi, 2-7-10-202, Gion, Kisarazu-shi, Chiba 292-0052, JP;
Otsuki, Tetsuji, 3-1-10-B102, Asahi, Kisarazu-shi, Chiba 292-0055, JP;
Koga, Hisashi, 2-4-15, Asahi, Kisarazu-shi, Chiba 292-0055, JP
PATENT ASSIGNEE(S): Helix Research Institute, 1532-3 Yana, Kisarazu-shi, Chiba 292-0812, JP
PATENT ASSIGNEE NO: 2656450
AGENT: VOSSIUS & PARTNER, Siebertstrasse 4, 81675 Muenchen, DE
AGENT NUMBER: 100314
OTHER SOURCE: BEPA2001070 EP 1130094 A2 1381
SOURCE: Wila-EPZ-2001-H36-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO; R SI
PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

| PATENT NO | KIND | DATE |
|---|---|---|
| EP 1130094 | A2 | 20010905 |
| 'OFFENLEGUNGS' DATE: | | 20010905 |
| APPLICATION INFO.: | EP 2000-114089 | 20000707 |
| PRIORITY APPLN. INFO.: | JP 1999-1944861999 | 19990708 |
| | JP 2000-2000118774 | 20000111 |
| | JP 2000-2000183765 | 20000502 |

L48 ANSWER 31 OF 48 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI
ACCESSION NUMBER: 2002-03511 BIOTECHDS
TITLE: Improving stability and/or solubility of proteins expressed in vivo or in vitro;
**vector** pECl-1 expression Escherichia coli useful for protein engineering
AUTHOR: Sanders M C
PATENT ASSIGNEE: Expressive-Constructs
LOCATION: Worcester, MA, USA.
PATENT INFO: WO 2001083804 8 Nov 2001

APPLICATION INFO: WO 2001-US14692 3 May 2001
PRIORITY INFO: US 2000-201407 3 May 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-011413 [01]
AN 2002-03511 BIOTECHDS
AB Methods for improving protein stability or solubility, are claimed. Also claimed are: a method (I) for producing a soluble and active recombinant protein; a method (II) for preventing unwanted proteolysis of a recombinant protein; a method for **purifying** native cattle **alpha-crystallin** protein; a method of **purifying** recombinant **alpha-crystallin** type **HIS-tagged** proteins; and a method (V) for protecting a protein from proteolysis during **purification**. The methods are used to improve protein stability, folding or solubility when produced either in vivo or in vitro. (23pp)

L48 ANSWER 32 OF 48 USPATFULL
ACCESSION NUMBER: 2000:160780 USPATFULL
TITLE: Synthetic transcriptional modulators and uses thereof
INVENTOR(S): Verdine, Gregory L., 91 Outlook Dr., Lexington, MA, United States 02173
Nyanguile, Origene, 2517 Baltimore Rd. #4, Rockville, MD, United States 20853

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6153383 | | 20001128 |
| APPLICATION INFO.: | US 1997-987912 | | 19971209 (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartzman, Robert A.
LEGAL REPRESENTATIVE: Foley, Hoag & Eliot LLP, Vincent, Matthew P., Clauss, Isabelle M.
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2897
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 33 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2000061621 PCTFULL ED 20020515
TITLE (ENGLISH): FLEA HEAD, NERVE CORD, HINDGUT AND MALPIGHIAN TUBULE NUCLEIC ACID MOLECULES, PROTEINS AND USES THEREOF
TITLE (FRENCH): MOLECULES D'ACIDES NUCLEIQUES ET PROTEINES ISSUES DE LA TETE, DE LA MOELLE EPINIERE, DE L'INTESTIN POSTERIEUR ET DU TUBE DE MALPIGHI DE PUCES ET UTILISATIONS CORRESPONDANTES
INVENTOR(S): BRANDT, Kevin, S.; GAINES, Patrick, J.; STINCHCOMB, Dan, T.; WISNEWSKI, Nancy
PATENT ASSIGNEE(S): HESKA CORPORATION
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2000061621 | A2 | 20001019 |

DESIGNATED STATES AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-US9437 A 20000407

PRIORITY INFO.: US 1999-60/128,704 19990409

ABEN The present invention relates to flea head, nerve cord, hindgut and malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

ABFR La presente invention se rapporte a des proteines issues de la tete, de la moelle epiniere, de l'intestin posterieur et du tube de Malpighi de puces, a des molecules d'acides nucleiques issues de la tete, de la moelle epiniere, de l'intestin posterieur et du tube de Malpighi de puces, et notamment des molecules d'acides nucleiques qui codent pour ces proteines de la tete, la moelle epiniere, l'intestin posterieur et le tube de Malpighi de puces, ainsi qu'a des anticorps diriges contre l'activite des proteines de la tete, la moelle epiniere, l'intestin posterieur et le tube de Malpighi de puces. La presente invention se rapporte egalement a des procedes permettant de produire ces proteines, molecules d'acides nucleiques, anticorps et composes inhibiteurs. Elle se rapporte egalement a des compositions therapeutiques comportant des proteines, des molecules d'acides nucleiques ou des composes protecteurs derives des proteines decrites ci-dessus ainsi qu'a l'utilisation de ces compositions therapeutiques pour proteger des animaux contre l'infestation par des puces. La presente invention se rapporte en outre a l'utilisation de proteines issues de la tete, de la moelle epiniere, de l'intestin posterieur et du tube de Malpighi de puces pour produire des composes inhibiteurs.

L48 ANSWER 34 OF 48 PCTFULL 

ACCESSION NUMBER: 2000028011 PCTFULL ED 20020515

TITLE (ENGLISH): FK506-BASED REGULATION OF BIOLOGICAL EVENTS

TITLE (FRENCH): REGULATION FONDEE SUR FK506 D'EVENEMENTS BIOLOGIQUES

INVENTOR(S): CLEMONS, Paul, A.; GLADSTONE, Brian, G.; SETH, Abhinav; SCHREIBER, Stuart, L.

PATENT ASSIGNEE(S): PRESIDENT AND FELLOWS OF HARVARD COLLEGE; CLEMONS, Paul, A.; GLADSTONE, Brian, G.; SETH, Abhinav; SCHREIBER, Stuart, L.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2000028011 | A2 | 20000518 |

DESIGNATED STATES AU CA JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1999-US25766 A 19991105
PRIORITY INFO.: US 1998-60/107,473 19981106

ABEN This invention provides methods and materials for making and using genetically engineered cells which are responsive to the presence of an FKBP/CAB ligand or a cyclophilin/CAB ligand. The invention relies upon the introduction into cells of recombinant DNAs encoding fusion proteins which are capable of forming a complex with each other in the presence of ligand. One of the fusion proteins contains a calcineurin A/calcineurin B domain (CAB) and at least one heterologous protein domain. The second fusion protein contains a domain derived from an FKBP protein which is capable of binding to an FKBP/CAB ligand and forming a complex with a CAB-containing protein. The second fusion protein may alternatively contain a cyclophilin domain which is capable of binding cyclosporin or other cyclophilin/CAB ligand and forming a complex with a CAB-containing protein. The second fusion protein also contains at least one heterologous domain.

ABFR On decrit des matieres et des procedes qui permettent de reguler des evenements biologiques tels que la transcription de genes cibles et la croissance, la proliferation ou la differenciation de cellules genetiquement modifiees.

L48 ANSWER 35 OF 48 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1059354 EUROPATFULL EW 200050 FS OS
TITLE: Sequence-determined DNA fragments and corresponding polypeptides encoded thereby.
DNS-fragmente mit bestimmter Sequenz und die dadurch kodierte Polypeptide.
Fragments d'ADN avec des sequences determinees et polypeptides encodees par lesdits fragments.
INVENTOR(S): Alexandrov, Nickolai, 1404 Oak Trail St., Thousand Oaks, CA 91320, US;
Troukhan, Maxim E., 1675 Amberwood Dr. No. 2, South Pasadena, CA 91030, US
PATENT ASSIGNEE(S): Ceres Incorporated, 3007 Malibu Canyon Road, Malibu, CA 90265, US
PATENT ASSIGNEE NO: 2967260
AGENT: Bannerman, David Gardner et al., Withers & Rogers, Goldings House, 2 Hays Lane, London SE1 2HW, GB
AGENT NUMBER: 28001
OTHER SOURCE: BEPA2000096 EP 1059354 A2 0418
SOURCE: Wila-EPZ-2000-H50-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R

SE; R AL; R LT; R LV; R MK; R RO; R SI
PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

| PATENT NO | KIND | DATE |
|---|---|---|
| EP 1059354 | A2 | 20001213 |

'OFFENLEGUNGS' DATE: 20001213
APPLICATION INFO.: EP 2000-304943 20000612
PRIORITY APPLN. INFO.: US 1999-138540 19990610
US 1999-138847 19990610

L48 ANSWER 36 OF 48 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1033405 EUROPATFULL EW 200036 FS OS
TITLE: Sequence-determined DNA fragments and corresponding polypeptides encoded thereby.
DNS-fragmente mit bestimmter Sequenz und die dadurch kodierte Polypeptide.
Fragments d'ADN avec des sequences determinees et polypeptides encodees par lesdits fragments.
INVENTOR(S): Alexandrov, Nickolai, 1404 Oak Trail St., Thousand Oaks, CA 91320, US;
Brover, Vyacheslav, 5916 N. Las Virgenes Rd. #590, Calabasas, CA 91302, US;
Chen, Xianfeng, 1705 S. Westgate Ave. #2, Los Angeles, CA 90025, US;
Subramanian, Gopalakrishnan, 4205 Peach Slope Rd., Moorpark, CA 93021, US;
Troukhan, Maxim E., 1675 Amberwood Dr. #2, South Pasadena, CA 91030, US;
Zheng, Liansheng, 12333 Wild Turkey Court, #B, Creve Coeur, MO 63141, US;
Dumas, J., US
PATENT ASSIGNEE(S): Ceres Incorporated, 3007 Malibu Canyon Road, Malibu, CA 90265, US
PATENT ASSIGNEE NO: 2967260
AGENT: Bannerman, David Gardner et al., Withers & Rogers, Goldings House, 2 Hays Lane, London SE1 2HW, GB
AGENT NUMBER: 28001
OTHER SOURCE: BEPA2000068 EP 1033405 A2 0344
SOURCE: Wila-EPZ-2000-H36-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO; R SI
PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

| PATENT NO | KIND | DATE |
|---|---|---|
| EP 1033405 | A2 | 20000906 |

'OFFENLEGUNGS' DATE: 20000906
APPLICATION INFO.: EP 2000-301439 20000225
PRIORITY APPLN. INFO.: US 1999-121825 19990225
US 1999-123180 19990305
US 1999-123548 19990309
US 1999-125788 19990323
US 1999-126264 19990325
US 1999-126785 19990329
US 1999-127462 19990401
US 1999-128234 19990406
US 1999-128714 19990408
US 1999-129845 19990416

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|---|---|
| US 1999-130077 | 19990419 |
| US 1999-130449 | 19990421 |
| US 1999-130891 | 19990423 |
| US 1999-130510 | 19990423 |
| US 1999-131449 | 19990428 |
| US 1999-132407 | 19990430 |
| US 1999-132048 | 19990430 |
| US 1999-132484 | 19990504 |
| US 1999-132485 | 19990505 |
| US 1999-132487 | 19990506 |
| US 1999-132486 | 19990506 |
| US 1999-132863 | 19990507 |
| US 2000-176866 | 20000119 |
| US 2000-176867 | 20000119 |
| US 2000-176910 | 20000119 |
| US 2000-178166 | 20000126 |
| US 2000-178545 | 20000127 |
| US 2000-178547 | 20000127 |
| US 2000-177666 | 20000127 |
| US 2000-178546 | 20000127 |
| US 2000-178544 | 20000127 |
| US 2000-178754 | 20000128 |
| US 2000-178755 | 20000128 |
| US 2000-179388 | 20000201 |
| US 2000-179395 | 20000201 |
| US 2000-180139 | 20000203 |
| US 2000-180039 | 20000203 |
| US 2000-180206 | 20000204 |
| US 2000-180207 | 20000204 |
| US 2000-180696 | 20000207 |
| US 2000-180695 | 20000207 |
| US 2000-181214 | 20000209 |
| US 2000-181228 | 20000209 |
| US 2000-181551 | 20000210 |
| US 2000-181476 | 20000210 |
| US 2000-182478 | 20000215 |
| US 2000-182477 | 20000215 |
| US 2000-182516 | 20000215 |
| US 2000-182512 | 20000215 |
| US 2000-183166 | 20000217 |
| US 2000-183165 | 20000217 |

L48 ANSWER 37 OF 48 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 1999042118 PCTFULL ED 20020515

TITLE (ENGLISH): COMPOUNDS AND METHODS FOR DIAGNOSIS OF TUBERCULOSIS

TITLE (FRENCH): COMPOSES ET METHODES POUR DIAGNOSTIQUER LA TUBERCULOSE

INVENTOR(S): REED, Steven, G.; SKEIKY, Yasir, A., W.; DILLON, Davin, C.; CAMPOS-NETO, Antonio; HOUGHTON, Raymond; VEDVICK, Thomas, S.; TWARDZIK, Daniel, R.; LODES, Michael, J.; HENDRICKSON, Ronald, C.

PATENT ASSIGNEE(S): CORIXA CORPORATION

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9942118 | A2 | 19990826 |

DESIGNATED STATES: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 1999-US3265 A 19990217

PRIORITY INFO.: US 1998-09/024,753 19980218
US 1998-09/072,596 19980505

L48 ANSWER 38 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1999042076 PCTFULL ED 20020515
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR IMMUNOTHERAPY AND DIAGNOSIS OF TUBERCULOSIS
TITLE (FRENCH): COMPOSES ET METHODES POUR L'IMMUNOTHERAPIE ET LE DIAGNOSTIC DE LA TUBERCULOSE
INVENTOR(S): REED, Steven, G.; SKEIKY, Yasir, A., W.; DILLON, Davin, C.; CAMPOS-NETO, Antonio; HOUGHTON, Raymond; VEDVICK, Thomas, S.; TWARDZIK, Daniel, R.; LODES, Michael, J.; HENDRICKSON, Ronald, C.
PATENT ASSIGNEE(S): CORIXA CORPORATION
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9942076 | A2 | 19990826 |

DESIGNATED STATES AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 1999-US3268 A 19990217
PRIORITY INFO.: US 1998-09/025,197 19980218
US 1998-09/072,967 19980505

ABEN Compounds and methods for inducing protective immunity against tuberculosis are disclosed. The compounds provided include polypeptides that contain at least one immunogenic portion of one or more i(M. tuberculosis) proteins and DNA molecules encoding such polypeptides. Such compounds may be formulated into vaccines and/or pharmaceutical compositions for immunization against i(M. tuberculosis) infection, or may be used for the diagnosis of tuberculosis.

ABFR L'invention concerne des composes et des methodes destines a induire une immunite protectrice contre la tuberculose. Les composes de cette invention renferment des polypeptides contenant au moins une partie immunogene d'une ou plusieurs proteines de i(M. tuberculosis) et molecules d'ADN codant pour ces polypeptides. Ces composes peuvent entrer dans la composition de vaccins et/ou de compositions pharmaceutiques pour une immunisation contre toute infection a i(M. tuberculosis), ou etre utilises pour diagnostiquer la tuberculose.

L48 ANSWER 39 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1999041258 PCTFULL ED 20020515
TITLE (ENGLISH): NOVEL DIMERIZING AGENTS, THEIR PRODUCTION AND USE
TITLE (FRENCH): AGENTS DE DIMERISATION, PRODUCTION ET UTILISATION
INVENTOR(S): SCHREIBER, Stuart, L.; CRABTREE, Gerald, R.; LIBERLES, Stephen, D.
PATENT ASSIGNEE(S): PRESIDENT AND FELLOWS OF HARVARD COLLEGE
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9941258 | A1 | 19990819 |

DESIGNATED STATES AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1999-US3095 A 19990212
PRIORITY INFO.: US 1998-60/074,584 19980213

ABEN Materials and methods are disclosed for regulation of biological events such as target gene transcription and growth, proliferation or differentiation of engineered cells.

ABFR L'invention concerne des agents et des procedes permettant de reguler un certain nombre d'evenements biologiques, comme la transcription et la croissance de genes cibles, ou la proliferation et la differenciation de cellules manipulees.

L48 ANSWER 40 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1999036553 PCTFULL ED 20020515
TITLE (ENGLISH): REGULATION OF BIOLOGICAL EVENTS USING MULTIMERIC CHIMERIC PROTEINS
TITLE (FRENCH): REGULATION DE PHENOMENES BIOLOGIQUES AU MOYEN DE PROTEINES CHIMERES MULTIMERES
INVENTOR(S): CLACKSON, Timothy, P.; GILMAN, Michael, Z.; HOLT, Dennis, A.; KEENAN, Terence, P.; ROZAMUS, Leonard; YANG, Wu
PATENT ASSIGNEE(S): ARIAD GENE THERAPEUTICS, INC.; CLACKSON, Timothy, P.; GILMAN, Michael, Z.; HOLT, Dennis, A.; KEENAN, Terence, P.; ROZAMUS, Leonard; YANG, Wu
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9936553 | A2 | 19990722 |

DESIGNATED STATES AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1999-US178 A 19990115
PRIORITY INFO.: US 1998-60/071,591 19980115
US 1998-60/072,016 19980121
US 1998-60/072,219 19980122
US 1998-09/012,097 19980122

ABEN Materials and methods are disclosed for regulation of biological events such as target gene transcription and growth, proliferation or differentiation of engineered cells.

ABFR L'invention concerne des matieres et des procedes servant a reguler des phenomenes biologiques tels que la transcription et la croissance d'un gene cible, la proliferation ou la differenciation de cellules mises au point genetiquement.

L48 ANSWER 41 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1999030164 PCTFULL ED 20020515
TITLE (ENGLISH): METHOD TO IDENTIFY TRANSCRIPTIONAL MODULATORS
TITLE (FRENCH): PROCEDE D'IDENTIFICATION DE MODULATEURS DE TRANSCRIPTION
INVENTOR(S): VERDINE, Gregory, L.; NYANGUILE, Origene
PATENT ASSIGNEE(S): PRESIDENT AND FELLOWS OF HARVARD COLLEGE
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|

WO 9930164 A1 19990617
DESIGNATED STATES AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1998-US26101 A 19981209
PRIORITY INFO.: US 1997-08/987,912 19971209
ABEN Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.
ABFR L'invention porte sur de nouveaux modulateurs de transcription de synthese presentant au moins un ligand selectionne lie a au moins une portion modulant la transcription. Lesdits modulateurs, qui peuvent comporter un ligand lie a un fragment chimique, peuvent servir a reguler selectivement l'expression de genes et a identifier certains composants du mecanisme de transcription.

L48 ANSWER 42 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1999007860 PCTFULL ED 20020515
TITLE (ENGLISH): IMMUNE RESPONSES AGAINST HPV ANTIGENS ELICITED BY COMPOSITIONS COMPRISING AN HPV ANTIGEN AND A STRESS PROTEIN OR AN EXPRESSION **VECTOR** CAPABLE OF EXPRESSION OF THESE PROTEINS
TITLE (FRENCH): REPONSES IMMUNITAIRES CONTRE LES ANTIGENES DU VPH ET DECLENCHEES PAR DES COMPOSITIONS COMPRENANT UN ANTIGENE DU VPH, ET PROTEINE DU STRESS OU VECTEUR D'EXPRESSION CAPABLE D'EXPRIMER CES PROTEINES
INVENTOR(S): MIZZEN, Lee; CHU, Randall
PATENT ASSIGNEE(S): STRESSGEN BIOTECHNOLOGIES CORPORATION; MIZZEN, Lee; CHU, Randall
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9907860 | A1 | 19990218 |

DESIGNATED STATES AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
APPLICATION INFO.: WO 1998-CA246 A 19980320
PRIORITY INFO.: US 1997-60/054,835 19970805
ABEN The present invention relates to compositions for inducing an immune response, preferably a cellular, in particular a cell-mediated, cytolytic immune response, to human papillomavirus (HPV) protein antigens displayed by HPV or exhibited by infected cells including cells from cervical and other tumors. In one embodiment, compositions comprise an HPV protein antigen joined to a stress protein (or heat shock protein (Hsp)). The HPV protein antigen may be joined to the stress protein by chemical conjugation or noncovalently using linking moieties, or the HPV protein antigen and the stress protein may be joined in a fusion protein containing both HPV protein antigen and stress

protein sequences. In another embodiment, compositions comprise an expression **vector** including, in expressible form, sequences encoding the HPV protein antigen and sequences encoding the stress protein. The expression **vector** can be introduced into cells of a subject, or it can be used to transduce cells of the subject i(ex vivo), resulting in the expression of an HPV protein antigen-stress protein fusion protein that will stimulate the subject's immune response to the HPV protein antigen. The present invention also relates to compositions comprising a stress protein linked to an HPV antigen and another pharmacologically acceptable component, to stress protein-HPV protein antigen fusions and conjugates and to expression **vectors** encoding and capable of directing the expression in a subject's cells of a fusion protein comprising a stress protein and an HPV protein antigen sequence. The present invention also relates to uses of these compositions to induce immune responses against HPV and HPV protein antigen-exhibiting cells including HPV-associated tumors.

ABFR La presente invention concerne des compositions permettant d'induire une reponse immunitaire, de preference une reponse immunitaire cellulaire de type II, et plus particulierement a mediation cellulaire, contre les antigenes du Virus des Papillomes Humains (VPH) que montre le VPH, ou que montrent des cellules infectees des tumeurs du col de l'uterus et d'autres tumeurs. Une realisation de l'invention porte sur des compositions comprenant une proteine antigene du VPH jointe a une proteine du stress (Hsp). L'antigene du VPH peut etre joint a une proteine du stress par conjugaison chimique ou par non-covalence en utilisant des groupes fonctionnels de liaison. Mais l'antigene du VPH peut egalement etre joint dans une proteine hybride contenant d'une part l'antigene du VPH, et d'autre part des sequences de proteine du stress. Une autre realisation porte sur des compositions comprenant un vecteur d'expression incluant, sous forme exprimable, des sequences codant pour l'antigene du VPH et des sequences codant pour la proteine du stress. Le vecteur d'expression peut etre introduit dans les cellules d'un sujet. Mais il peut egalement servir a la transduction de cellules du sujet i(ex vivo), ce qui aboutit a l'expression d'une proteine hybride proteine du stress - antigene du VPH qui doit normalement stimuler la reponse immunitaire du sujet a l'antigene du VPH. L'invention concerne egalement, non seulement des compositions comprenant une proteine du stress liee a un antigene du VPH et un autre composant pharmacologiquement acceptable, mais aussi des hybrides et des conjugues proteine du stress - antigene du VPH, et enfin des vecteurs d'expression codant pour et capable de diriger l'expression dans les cellules d'un sujet dans le cas d'une proteine hybride comprenant une proteine du stress et une sequence antigene du VPH.
L'invention concerne enfin l'utilisation de ces compositions pour induire les reponses immunitaires contre le VPH et des cellules montrant l'antigene VPH, y compris les tumeurs liees au VPH.

L48 ANSWER 43 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1998016646 PCTFULL ED 20020514
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR IMMUNOTHERAPY AND DIAGNOSIS OF TUBERCULOSIS
TITLE (FRENCH): COMPOSES ET METHODES UTILISES POUR L'IMMUNOTHERAPIE ET LE DIAGNOSTIC DE LA TUBERCULOSE
INVENTOR(S): REED, Steven, G.; SKEIKY, Yasir, A., W.; DILLON, Davin, C.; CAMPOS-NETO, Antonio; HOUGHTON, Raymond; VEDVICK, Thomas, S.; TWARDZIK, Daniel, R.; LODES, Michael, J.
PATENT ASSIGNEE(S): CORIXA CORPORATION
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9816646 | A2 | 19980423 |

DESIGNATED STATES AL AM AT AU BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

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| APPLICATION INFO.: | WO 1997-US18293 | A | 19971007 |
| PRIORITY INFO.: | US 1996-8/730,510 | | 19961011 |
| | US 1997-8/818,112 | | 19970313 |

ABEN Compounds and methods for inducing protective immunity against tuberculosis are disclosed. The compounds provided include polypeptides that contain at least one immunogenic portion of one or more M. tuberculosis proteins and DNA molecules encoding such polypeptides. Such compounds may be formulated into vaccines and/or pharmaceutical compositions for immunization against M. tuberculosis infection, or may be used for the diagnosis of tuberculosis.

ABFR L'invention concerne des composes et des methodes destines a induire une immunite contre la tuberculose. Ces composes comprennent des polypeptides qui contiennent au moins une partie immunogene d'une ou plusieurs proteines de M. tuberculosis et des molecules d'ADN codant ces polypeptides. De tels composes peuvent etre prepares sous forme de vaccins et/ou de compositions pharmaceutiques qui servent a immuniser un patient contre une infection provoquee par M. tuberculosis ou a diagnostiquer la tuberculose.

L48 ANSWER 44 OF 48 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1998016645 PCTFULL ED 20020514
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR DIAGNOSIS OF TUBERCULOSIS
TITLE (FRENCH): COMPOSES ET PROCEDES POUR DIAGNOSTIQUER LA TUBERCULOSE
INVENTOR(S): REED, Steven, G.; SKEIKY, Yasir, A., W.; DILLON, Davin, C.; CAMPOS-NETO, Antonio; HOUGHTON, Raymond; VEDVICK, Thomas, S.; TWARDZIK, Daniel, R.; LODES, Michael, J.
PATENT ASSIGNEE(S): CORIXA CORPORATION
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 9816645 | A2 | 19980423 |

DESIGNATED STATES AL AM AT AU BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT UA UG UZ VN YU GH KE LS MW SD SZ
UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN
ML MR NE SN TD TG

APPLICATION INFO.: WO 1997-US18214 A 19971007
PRIORITY INFO.: US 1996-8/729,622 19961011
US 1997-8/818,111 19970313

ABEN Compounds and methods for diagnosing tuberculosis are disclosed. The compounds provided include
polypeptides that contain at least one antigenic portion of one or more M. tuberculosis proteins,
and DNA sequences encoding such polypeptides. Diagnostic kits containing such polypeptides or DNA
sequences and a suitable detection reagent may be used for the detection of M. tuberculosis
infection in patients and biological samples. Antibodies directed against such polypeptides are also
provided.

ABFR Cette invention porte sur des composes et des procedes servant a diagnostiquer la tuberculose.
Les composes de l'invention comprennent des polypeptides contenant au moins une partie antigenique
d'une ou plusieurs proteines de M. tuberculosis et des sequences d'ADN codant lesdits polypeptides.
Des trousses de diagnostic contenant lesdits polypeptides ou sequences d'ADN et un reactif de
depistage approprie peuvent etre utilises pour depister une infection M. tuberculosis chez des
patients ou dans des echantillons biologiques. L'invention porte aussi sur des anticorps diriges
contre lesdits polypeptides.

L48 ANSWER 45 OF 48 USPATFULL

ACCESSION NUMBER: 94:57739 USPATFULL
TITLE: Process for synthesizing human H2-prorelaxin, human H2-relaxin and fusion proteins thereof
INVENTOR(S): Hudson, Peter J., Bulleen, Australia
Niall, Hugh D., Elwood, Australia
Tregear, Geoffrey W., Hawthorn, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology and Medicine, Victoria, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5326694 | | 19940705 | |
| APPLICATION INFO.: | US 1992-871318 | | 19920420 | (7) |

DISCLAIMER DATE: 20050719
RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-665129, filed on 6 Mar 1991, now patented, Pat. No. US 5179195 which is a division of Ser. No. US 1987-21885, filed on 4 Mar 1987, now patented, Pat. No. US 5023321 which is a division of Ser. No. US 1983-560790, filed on 13 Dec 1983, now patented, Pat. No. US 4758516

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hill, Jr., Robert J.
ASSISTANT EXAMINER: Teng, Sally P.
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 10 Drawing Page(s)

LINE COUNT: 1009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes and DNA transfer **vectors** for the expression of human preprorelaxin; sub-units thereof, including genes and transfer **vectors** for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 46 OF 48 USPATFULL
ACCESSION NUMBER: 93:3675 USPATFULL
TITLE: Human relaxin polypeptides
INVENTOR(S): Hudson, Peter J., Victoria, Australia
Niall, Hugh D., Victoria, Australia
Tregear, Geoffrey W., Victoria, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology and Medicine, Melbourne, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5179195 | | 19930112 |
| APPLICATION INFO.: | US 1991-665129 | | 19910306 (7) |

RELATED APPLN. INFO.: Division of Ser. No. US 1987-21885, filed on 4 Mar 1987, now patented, Pat. No. US 5023321 which is a division of Ser. No. US 1983-560790, filed on 13 Dec 1983, now patented, Pat. No. US 4758516

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Ossanna, Nina
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 992
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes and DNA transfer **vectors** for the expression of human preprorelaxin; sub-units thereof, including genes and transfer **vectors** for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 47 OF 48 USPATFULL
ACCESSION NUMBER: 91:46779 USPATFULL
TITLE: Molecular cloning and characterization of a further gene sequence coding for human relaxin
INVENTOR(S): Hudson, Peter J., Bulleen, Australia
Niall, High D., Elwood, Australia
Tregear, Geoffrey W., Hawthorn, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology & Medicine, Victoria, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5023321 | | 19910611 |
| APPLICATION INFO.: | US 1987-21885 | | 19870304 (7) |

RELATED APPLN. INFO.: Division of Ser. No. US 1983-560790, filed on 13 Dec 1983, now patented, Pat. No. US 4758516

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Moskowitz, Margaret
ASSISTANT EXAMINER: Ossanna, Nina
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 2
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 963
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes and DNA transfer **vectors** for the expression of human preprorelaxin; sub-units thereof, including genes and transfer **vectors** for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 48 OF 48 USPATFULL
ACCESSION NUMBER: 88:45600 USPATFULL
TITLE: Molecular cloning and characterization of a further gene sequence coding for human relaxin
INVENTOR(S): Hudson, Peter J., Bulleen, Australia
Niall, Hugh D., Elwood, Australia
Tregear, Geoffrey W., Hawthorn, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology and Medicine, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 4758516 | | 19880719 | |
| APPLICATION INFO.: | US 1983-560790 | | 19831213 | (6) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Huleatt, Jayme A.
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak, and Seas
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1017
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes and DNA transfer **vectors** for the expression of human preprorelaxin; sub-units thereof, including genes and transfer **vectors** for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> s (alpha (w) crystallin) (s) bovine and (proteolysis or degradation or protease) and (preventing or prevent or inhibit?)
L49 3 FILE USPATFULL
L50 3 FILE PCTFULL
L51 6 FILE CAPLUS
L52 8 FILE BIOSIS
L53 5 FILE SCISEARCH
L54 11 FILE MEDLINE
L55 10 FILE EMBASE
L56 0 FILE TOXCENTER
L57 3 FILE EUROPATFULL
L58 2 FILE ESBIOBASE
L59 0 FILE GENBANK
L60 2 FILE BIOTECHNO
L61 0 FILE DRUGU
L62 2 FILE PASCAL
L63 1 FILE IFIPAT
L64 1 FILE WPIDS
L65 0 FILE AGRICOLA
L66 0 FILE BIOBUSINESS
L67 0 FILE BIOTECHDS
L68 0 FILE CABA
L69 0 FILE JICST-EPLUS
L70 1 FILE LIFESCI

TOTAL FOR ALL FILES
L71 58 (ALPHA (W) CRYSTALLIN) (S) BOVINE AND (PROTEOLYSIS OR DEGRADATIO N OR PROTEASE) AND (PREVENTING OR PREVENT OR INHIBIT?)

=> dup rem l71
DUPLICATE IS NOT AVAILABLE IN 'GENBANK'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L71
L72 26 DUP REM L71 (32 DUPLICATES REMOVED)

=> d l72 1-26 ibib abs

L72 ANSWER 1 OF 26 USPATFULL DUPLICATE 1
ACCESSION NUMBER: 2002:258814 USPATFULL
TITLE: Method and device for improving protein stability and solubility
INVENTOR(S): Sanders, Mitchell C., Leicester, MA, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2002142384 | A1 | 20021003 | |
| APPLICATION INFO.: | US 2001-848780 | A1 | 20010503 | (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2000-201407P | 20000503 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 506
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin

type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac I.sub.q). The soluble recombinant protein is purified using a fusion tag.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L72 ANSWER 2 OF 26 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002010433 PCTFULL ED 20020814
TITLE (ENGLISH): A DEVICE FOR DETECTING BACTERIAL CONTAMINATION AND METHOD OF USE
TITLE (FRENCH): DISPOSITIF DE DETECTION DE CONTAMINATION BACTERIENNE ET PROCEDE D'UTILISATION
INVENTOR(S): SANDERS, Mitchell, C.
PATENT ASSIGNEE(S): EXPRESSIVE CONSTRUCTS, INC.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002010433 | A2 | 20020207 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2001-US14613 A 20010503
PRIORITY INFO.: US 2000-60/201,405 20000503
ABEN A device and method for detecting the presence or absence of a prokaryotic microorganism are provided, comprising the steps of identifying a protein, such as a microbial-specific **protease** that characterizes the presence of a specific prokaryotic microbe and thereby provides a marker for that microbe; detecting the **protease** that is a marker for the presence of a specific prokaryotic microbe by cleaving a substance when the **protease** is present; and signaling the presence of that **protease** when cleavage has occurred. More specifically, the method comprises identifying at least one outer membrane protein or a secreted protein that is unique to a particular microbial pathogen such as for example Listeria monocytogenes and that is substrate specific.
ABFR L'invention concerne un dispositif et un procede de detection de la presence ou de l'absence de micro-organisme procaryote, le procede consistant a identifier une proteine, telle qu'une **protease** microbienne qui caracterise la presence d'un microbe procaryote specifique et fournit ainsi un marqueur pour ce microbe, a detecter la **protease** marqueur revelant la presence d'un microbe procaryote specifique par clivage d'une substance lorsque la **protease** est presente, et a signaler la presence de cette **protease** lorsque le clivage est realise. Le procede consiste, plus specifiquement, a identifier au moins une proteine de membrane exterieure ou une proteine secretee, unique d'un pathogene microbien particulier tel que, par exemple, Listeria monocytogenes et qui presente une specificite de substrat.

L72 ANSWER 3 OF 26 MEDLINE
ACCESSION NUMBER: 2002216779 MEDLINE
DOCUMENT NUMBER: 21950077 PubMed ID: 11952403
TITLE: Chaperone activity in the lens.
AUTHOR: Augusteyn Robert C; Murnane Letitia; Nicola Andrea; Stevens Arthur
CORPORATE SOURCE: National Vision Research Institute of Australia, 386 Cardigan Street, Carlton VIC 3053, Austalia.
SOURCE: Clin Exp Optom, (2002 Mar) 85 (2) 83-90.

Journal code: 8703442. ISSN: 0816-4622.
PUB. COUNTRY: Australia
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200207
ENTRY DATE: Entered STN: 20020416
Last Updated on STN: 20020709
Entered Medline: 20020708

AB INTRODUCTION: **alpha-crystallin**, the major protein of the eye lens, is a molecular chaperone that is able to **prevent** the precipitation of denatured proteins. This activity is thought to be important for the maintenance of lens transparency. Loss of the activity has been postulated to contribute to the development of cataract. The purpose of this study was to determine how chaperone activity was affected by growth and ageing of the lens. METHODS: **alpha-crystallins** were purified from nine concentric tissue layers removed from an adult **bovine** lens. The ability to **inhibit** the precipitation of beta(L)-crystallin, following thermal denaturation, was used to assess the chaperone activity of these proteins. The molar ratio of **alpha-crystallin**/beta(L)-crystallin required to **inhibit** the precipitation of beta(L)-crystallin by 50 per cent was used as a measure of the affinity of the chaperone for denatured protein. RESULTS: As evidenced by a gradual increase in the ratio, from 0.52 to 1.24, the protective ability of **alpha-crystallin** decreased from the outside of the lens into the centre. **alpha-crystallin** from the cortex of the lens provided greater protection against precipitation of proteins than older **alpha-crystallin** from the nucleus. The reasons for this were investigated. Gel electrophoresis of the proteins from each concentric layer revealed an increase in degraded polypeptides from approximately one per cent in the cortex to more than nine per cent in the centre of the lens. This increase appears to be correlated with the decrease in chaperone ability. Renaturing **alpha-crystallin** obtained from the nucleus did not increase its chaperone activity, indicating conformational changes were not responsible for the decreased activity. Phosphorylation did not appear to have any significant effect on the chaperone activity. CONCLUSION: The loss of chaperone activity, accompanying fibre cell compression into the centre of the lens, can be attributed to **degradation** of the **alpha-crystallin** polypeptides.

L72 ANSWER 4 OF 26 PCTFULL COPYRIGHT 2002 UniventioDUPLICATE 2
ACCESSION NUMBER: 2001083804 PCTFULL ED 20020826
TITLE (ENGLISH): A METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND SOLUBILITY
TITLE (FRENCH): METHODE ET DISPOSITIF POUR AMELIORER LA STABILITE ET LA SOLUBILITE DE PROTEINES
INVENTOR(S): SANDERS, Mitchell, C.
PATENT ASSIGNEE(S): EXPRESSIVE CONSTRUCTS, INC.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001083804 | A2 | 20011108 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2001-US14692 | A | 20010503 |
| PRIORITY INFO.: | US 2000-60/201,407 | | 20000503 |

ABEN A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. Coli is provided. Genes of interest are cloned into the multiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1mMIPTG that overcomes the lac repression (lac Iq). The soluble recombinant protein is purified using a fusion tag.

ABFR L'invention concerne une methode servant a exprimer des proteines en tant que chimere de fusion presentant un domaine proteique de type p26 ou alpha-crystallin, destinee a ameliorer la stabilite et la solubilite des proteines lorsqu'elles sont exprimees excessivement dans des bacteries telles que E. Coli. Des genes d'interet sont clones dans le site de clonage multiple du systeme vectorette pROTECT juste en aval de la proteine de type p26 ou alpha-crystallin et d'un site de clivage de thrombine. L'expression proteique est effectuee par un puissant promoteur bacterien (TAC). Cette expression est induite par l'addition de 1mMIPTG qui surmonte la repression de lac (lac Iq). La proteine recombinante soluble est purifiee au moyen d'un fragment de fusion.

L72 ANSWER 5 OF 26 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 2001057190 PCTFULL ED 20020827

TITLE (ENGLISH): NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

TITLE (FRENCH): ACIDES NUCLEIQUES ET POLYPEPTIDES

INVENTOR(S): TANG, Y., Tom; LIU, Chenghua; DRMANAC, Radoje, T.; ASUNDI, Vinod; ZHOU, Ping; XU, Chongjun; CAO, Yicheng; MA, Yunquing; ZHAO, Qing, A.; WANG, Dunrui; WANG, Jian-Rui; ZHANG, Jie; REN, Feiyan; CHEN, Rui-hong; WANG, Zhi, Wei; XUE, Aidong, J.; YANG, Yonghong; WEJHRMAN, Tom; GOODRICH, Ryle

PATENT ASSIGNEE(S): HYSEQ, INC.; TANG, Y., Tom; LIU, Chenghua; DRMANAC, Radoje, T.; ASUNDI, Vinod; ZHOU, Ping; XU, Chongjun; CAO, Yicheng; MA, Yunquing; ZHAO, Qing, A.; WANG, Dunrui; WANG, Jian-Rui; ZHANG, Jie; REN, Feiyan; CHEN, Rui-hong; WANG, Zhi, Wei; XUE, Aidong, J.; YANG, Yonghong; WEJHRMAN, Tom; GOODRICH, Ryle

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2001057190 | A2 | 20010809 |

DESIGNATED STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US4098 A 20010205

PRIORITY INFO.:

| | |
|---|---|
| US 2000-09/496,914 | 20000203 |
| US 2000-09/560,875 | 20000427 |
| US 2000-09/598,075 | 20000620 |
| US 2000-09/620,325 | 20000719 |
| US 2000-09/654,936 | 20000901 |
| US 2000-09/663,561 | 20000915 |
| US 2000-09/693,325 | 20001020 |
| US 2000-09/728,422 | 20001130 |

ABEN The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.

ABFR L'invention concerne des acides nucleiques, des sequences polypeptidiques codees par ces acides nucleiques et leurs utilisations correspondantes.

L72 ANSWER 6 OF 26 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 1130094 EUROPATFULL EW 200136 FS OS
TITLE: Primers for synthesizing full length cDNA clones and their use.
Primer zur Synthese von vollstaendigen cDNA Klonen und ihre Verwendung.
Amorces pour la synthese de cADN de pleine longueur et leur utilisation.
INVENTOR(S): Ota, Toshio, 1-2-7-105, Tsujido Shinmachi, Fujisawa-shi, Kanagawa 251-0042, JP;
Nishikawa, Tetsuo, 27-3-403, Hikawa-cho, Itabashi-ku, Tokyo 173-0013, JP;
Isogai, Takao, 511-12, Ohmuro, Ami-machi, Inashiki-gun, Ibaraki 300-0303, JP;
Hayashi, Koji, 1-9-446, Yushudai Nishi, Ichihara-shi, Chiba 299-0125, JP;
Ishii, Shizuko, 4508-19-202, Yana, Kisarazu-shi, Chiba 292-0812, JP;
Kawai, Yuri, 4508-19-201, Yana, Kisarazu-shi, Chiba 292-0812, JP;
Wakamatsu, Ai, 1473-4-202, Takayanagi, Kisarazu-shi, Chiba 292-0014, JP;
Sugiyama, Tomoyasu, 2-6-23-102, Kiyomidai, Kisarazu-shi, Chiba 292-0045, JP;
Nagai, Keiichi, 3-44-14-9-204, Sakuragaoka, Higashiyamato-shi, Tokyo 207-0022, JP;
Kojima, Shinichi, 2-7-10-202, Gion, Kisarazu-shi, Chiba 292-0052, JP;
Otsuki, Tetsuji, 3-1-10-B102, Asahi, Kisarazu-shi, Chiba 292-0055, JP;
Koga, Hisashi, 2-4-15, Asahi, Kisarazu-shi, Chiba 292-0055, JP
PATENT ASSIGNEE(S): Helix Research Institute, 1532-3 Yana, Kisarazu-shi, Chiba 292-0812, JP
PATENT ASSIGNEE NO: 2656450
AGENT: VOSSIUS & PARTNER, Siebertstrasse 4, 81675 Muenchen, DE
AGENT NUMBER: 100314
OTHER SOURCE: BEPA2001070 EP 1130094 A2 1381
SOURCE: Wila-EPZ-2001-H36-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO; R SI
PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

| PATENT NO | KIND | DATE |
|---|---|---|
| EP 1130094 | A2 | 20010905 |

'OFFENLEGUNGS' DATE: 20010905
APPLICATION INFO.: EP 2000-114089 20000707
PRIORITY APPLN. INFO.: JP 1999-1944861999 19990708
JP 2000-2000118774 20000111
JP 2000-2000183765 20000502

L72 ANSWER 7 OF 26 USPATFULL
ACCESSION NUMBER: 1999:132249 USPATFULL
TITLE: Healthy foods and cosmetics
INVENTOR(S): Yamaguchi, Fumio, Noda, Japan
Saito, Makoto, Noda, Japan
Ishikawa, Hiroharu, Noda, Japan

Kataoka, Shigehiro, Noda, Japan
Ariga, Toshiaki, Noda, Japan
PATENT ASSIGNEE(S): Kikkoman Corporation, Japan (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5972357 | | 19991026 |
| APPLICATION INFO.: | US 1997-975713 | | 19971121 (8) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | JP 1996-353869 | 19961219 |
| | JP 1997-199119 | 19970710 |
| | JP 1997-199120 | 19970710 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Clardy, S. Mark
ASSISTANT EXAMINER: Williamson, Michael A.
LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 856
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to healthy foods and cosmetics. More particularly, it relates to healthy foods and cosmetics containing a polyisoprenylated benzophenone derivatives as effective ingredients and having a variety of functions for maintaining health such as anti-ulcer activity, the Maillard reaction **inhibiting** activity, anti-oxidation activity, reactive oxygen species scavenging activity, and anti-tumor promotion activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L72 ANSWER 8 OF 26 EUROPATFULL COPYRIGHT 2002 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 764273 EUROPATFULL EW 199842 FS PS
TITLE: ALPHA B CRYSTALLIN FOR USE IN DIAGNOSIS AND THERAPY OF AUTO-IMMUNE DISEASES IN PARTICULAR MULTIPLE SCLEROSIS.
ALPHA B CRYSTALLIN ZUR VERWENDUNG IN DIAGNOSE UND THERAPIE VON AUTOIMMUNKRANKHEITEN, BESONDERS MULTIPLER SKEROSE.
CRISTALLINE ALPHA B UTILISEE DANS LE DIAGNOSTIC ET LE TRAITEMENT DE MALADIES AUTO-IMMUNES ET EN PARTICULIER LA SCLEROSE EN PLAQUE.
INVENTOR(S): VAN NOORT, Johannes, M., Lange Kleiweg 139, NL-2288 GJ Rijswijk, NL;
VAN SECHEL, Arianne, C., Lange Kleiweg 139, NL-2288 GJ Rijswijk, NL;
OUAGMIRI, Mustapha, El, Lange Kleijweg 139, NL-2288 GJ Rijswijk, NL
PATENT ASSIGNEE(S): NEDERLANDSE ORGANISATIE VOOR TOEGEPAST-NATUURWETENSCHAPPELIJK ONDERZOEK TNO, Juliana van Stolberglaan 148, 2595 CL Den Haag, NL
PATENT ASSIGNEE NO: 285523
AGENT: Smulders, Theodorus A.H.J., Ir. et al, Vereenigde Octrooibureaux Nieuwe Parklaan 97, 2587 BN 's-Gravenhage, NL
AGENT NUMBER: 21191
OTHER SOURCE: EPB1998056 EP 0764273 B1 981014
SOURCE: Wila-EPS-1998-H42-T2
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R

IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE

PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale Anmeldung)

PATENT INFORMATION:

| PATENT NO | KIND | DATE |
|---|---|---|
| EP 764273 | B1 | 19981014 |

'OFFENLEGUNGS' DATE: 19970326
APPLICATION INFO.: EP 1995-920305 19950608
PRIORITY APPLN. INFO.: EP 1994-201653 19940609
RELATED DOC. INFO.: WO 95-NL203 950608 INTAKZ
WO 9533997 951214 INTPNR

REF. NON-PATENT-LIT.: AMERICAN JOURNAL OF PATHOLOGY, vol. 140, no. 2, February 1992 HAGERSTOWN MD, USA, pages 345-356, T. IWAKA ET AL. 'Accumulation of alphaB-crystallin in central nervous system glia and neurons in pathologic conditions.' cited in the application CELL, vol. 57, no. 1, 7 April 1989 CAMBRIDGE MA, USA, pages 71-78, T. IWAKI ET AL. 'alphaB-crystallin is expressed in non-lenticular tissues and accumulates in Alexander's disease brain.' AMERICAN JOURNAL OF PATHOLOGY, vol. 143, no. 2, August 1993 HAGERSTOWN MD, USA, pages 487-495, T. IWAKI ET AL. 'alphaB-crystallin and 27-kd heat shock protein are regulated by stress conditions in the central nervous system and accumulate in Rosenthal fibers.' cited in the application THE EMBO JOURNAL, vol. 13, no. 4, 15 February 1994 OXFORD, GB, pages 945-953, I. NICHOLL ET AL. 'Chaperone activity of alpha-crystallins modulates intermediate filament assembly.' cited in the application THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 267, no. 11, 15 April 1992 BALTIMORE MD, USA, pages 7718-7725, K. KATO ET AL. 'Copurification of small heat shock protein with alphaB crystallin from human skeletal muscle.' THE JOURNAL OF IMMUNOLOGY, vol. 149, no. 4, 15 August 1992 BALTIMORE MD, USA, pages 1444-1451, R. SOBEL ET AL. 'The immunopathology of acute experimental allergic encephalomyelitis induced with myelin proteolipid protein. T cell receptors in inflammatory lesions.'

L72 ANSWER 9 OF 26 USPATFULL
ACCESSION NUMBER: 95:7820 USPATFULL
TITLE: Ubiquitin carrier enzyme E2-F1, purification, production, and use
INVENTOR(S): Ciechanover, Aaron J., Haifa, Israel
Blumenfeld, Nava, Haifa, Israel
Gonen, Hedva, Haifa, Israel
PATENT ASSIGNEE(S): Rappaport Family Institute for Research in the Medical Sciences, Haifa, Israel (non-U.S. corporation)

| NUMBER | KIND | DATE |
|---|---|---|
| PATENT INFORMATION: US 5384255 | | 19950124 |
| APPLICATION INFO.: US 1993-80073 | | 19930621 (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Prouty, Rebecca
LEGAL REPRESENTATIVE: Sterne, Kessler Goldstein & Fox
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for isolating and purifying novel species of E2

ubiquitin-carrier protein, designated E2-F1, is disclosed. A method for preparing enzymatically active fragments of E2-F1 enzyme is also disclosed. The use of purified E2-F1 to produce antibodies is also disclosed. The use of such E2-F1-specific antibodies to detect the presence of E2-F1 in a biological sample, and to **inhibit** protein **degradation** are also disclosed. Recombinant DNA molecules which code for E2-F1, and recombinant hosts and vectors which contain E2-F1 coding sequences are also disclosed. The use of such recombinant hosts and vectors to produce E2-F1 protein is also disclosed. The use of purified E2-F1 to identify and to isolate E3 enzyme is also disclosed. Methods for screening substances for the ability to **inhibit** E2-F1 enzyme activity are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L72 ANSWER 10 OF 26 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 654530 EUROPATFULL EW 199521 FS OS STA B
TITLE: Ubiquitin carrier enzyme E2-F1, purification, production and use.
Ubiquitin-Traegerenzym E2-F1, seine Reinigung, Herstellung und Verwendung.
L'enzyme E2-F1, porteur d'ubiquitine, sa purification, sa production, et son utilisation.
INVENTOR(S): Ciechanover, Aaron J., 21 Peretz Bernstein Street, Haifa 34981, IL;
Blumenfeld, Nava, 33 Beth Lehem Street, Haifa 35566, IL;
Gonen, Hevda, 1 Dr. Tziper Street, Kiryat Haim, Haifa 26272, IL
PATENT ASSIGNEE(S): RAPPAPORT FAMILY INSTITUTE FOR RESEARCH IN THE MEDICAL SCIENCE, P.O.Box 9697, Haifa 31096, IL
PATENT ASSIGNEE NO: 1801090
AGENT: Dr. Fuchs, Dr. Luderschmidt Dr. Mehler, Dipl.-Ing. Weiss Patentanwaelte, Abraham-Lincoln-Strasse 7, D-65189 Wiesbaden, DE
AGENT NUMBER: 100492
OTHER SOURCE: ESP1995035 EP 0654530 A2 950524
SOURCE: Wila-EPZ-1995-H21-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R SE
PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

| PATENT NO | KIND | DATE |
|---|---|---|
| EP 654530 | A2 | 19950524 |
| 'OFFENLEGUNGS' DATE: | | 19950524 |
| APPLICATION INFO.: | | 19940616 |
| PRIORITY APPLN. INFO.: US 1993-80073 | | 19930621 |

L72 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
ACCESSION NUMBER: 1995:933631 CAPLUS
DOCUMENT NUMBER: 123:335891
TITLE: Age-dependent association of isolated bovine lens multicatalytic proteinase complex (proteasome) with heat-shock protein 90, an endogenous **inhibitor**
AUTHOR(S): Wagner, B. J.; Margolis, Joyce W.
CORPORATE SOURCE: Dep. Biochem., Univ. Med. Dentistry-New Jersey Medical Sch., Newark, NJ, 07103, USA
SOURCE: Archives of Biochemistry and Biophysics (1995), 323(2), 455-62
CODEN: ABBIA4; ISSN: 0003-9861

PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The multicatalytic proteinase complex (MPC) (proteasome) is a high-mol.-wt. proteolytic enzyme found in eukaryotic cells and archaebacteria. Regulatory proteins that **inhibit** or activate the MPC have been described. Assocn. with an ATPase complex alters the specificity of the multicatalytic proteinase complex to permit cleavage of ubiquitinylated proteins. Unidentified proteins have been obsd. in highly purified prepns. of the multicatalytic proteinase complex. Based on immunoreactivity and N-terminal sequencing, the authors have identified heat-shock protein 90 as a major component of the multicatalytic proteinase complex prepd. from 1-mo, but not 2-yr bovine lenses. .alpha.-Crystallin, a lens structural protein with chaperone activity, is also found in multicatalytic proteinase complex prepns. Both heat-shock protein 90 and .alpha.-crystallin **inhibit** hydrolysis of Cbz-Leu-Leu-Leu-MCA by the multicatalytic proteinase complex as a stoichiometry of 1 mol heat-shock protein per mol of MPC. Heat-shock proteins may interact with denatured proteins and facilitate their **degrdn**. These studies give evidence for the involvement of heat-shock proteins in **proteolysis** by direct interaction with the multicatalytic proteinase complex.

L72 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
ACCESSION NUMBER: 1995:689635 CAPLUS
DOCUMENT NUMBER: 123:108671
TITLE: **Degradation** of differentially oxidized . **alpha.-crystallins** in **bovine** lens epithelial cells
AUTHOR(S): Huang, Li L.; Shang, Fu; Nowell, Thomas R., Jr.; Taylor, Allen
CORPORATE SOURCE: USDA Human Nutrition Res. Cent. Aging, Tufts Univ., Boston, MA, USA
SOURCE: Experimental Eye Research (1995), 61(1), 45-54
CODEN: EXERA6; ISSN: 0014-4835
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB There is a growing consensus that altered proteins are more susceptible to **degrdn**. than native proteins. The enhancement of **degrdn** . of damaged proteins may be of significance since it **prevents** the accumulation of damaged proteins in cells. Several proteolytic pathways have been discovered in the lens. These include ATP-independent, ATP-dependent and ATP/ubiquitin-dependent proteolytic pathways. However, the extent of involvement of these proteolytic pathways in **degrdn** . of damaged proteins is not well described. .alpha.-Crystallin was oxidized by exposure to 0.03-3.2 mol .bul.OH (mol protein)-1. Modifications to the oxidized .alpha.-crystallin and proteolytic susceptibility of the oxidized .alpha.-crystallin were studied. Exposure to > 0.32 mol .bul.OH per mol of subunit produced aggregates and fragments of .alpha.-crystallin. Changes in isoelec. points of the proteins were obsd. after exposure to 0.64 mol .bul.OH (mol protein)-1. The extent of loss of tryptophan and sulfhydryl groups was related to the level of .bul.OH-exposure. Carbonyl content increased progressively with increasing oxidn. When incubated with a supernatant of **bovine** lens epithelial cells, the .bul.OH-modified proteins were proteolytically degraded up to three times faster than untreated .**alpha.-crystallin**. ATP stimulated the **degrdn**. of native .alpha.-crystallin and .alpha.-crystallin which was exposed to 1.6 mol .bul.OH (mol subunit protein)-1 (.alpha.1.6). Sixty-seven per cent and 100% of the ATP-dependent **degrdn**. of native .alpha.-crystallin and .alpha.1.6 was ubiquitin-dependent, resp. The data indicate that . **alpha.-crystallins** oxidized by .bul.OH are recognized and degraded rapidly by cytoplasmic proteolytic systems in **bovine** lens epithelial cells. Both ATP-independent and ATP/ubiquitin-dependent

proteolytic pathways are involved in the **degrdn**. of native and oxidized .alpha.-crystallin.

L72 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
ACCESSION NUMBER: 1994:454254 CAPLUS
DOCUMENT NUMBER: 121:54254
TITLE: Characterization of denatured protein inducers of the heat shock (stress) response in Xenopus laevis oocytes
AUTHOR(S): Mifflin, Laura C.; Cohen, Robert E.
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. California, Los Angeles, CA, 90024, USA
SOURCE: Journal of Biological Chemistry (1994), 269(22), 15710-17
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In addn. to thermal stress, a large variety of phys. and chem. treatments are known to induce heat shock gene expression. Denatured protein, thought to result from the stress condition, has been postulated to act as the common signal. Accordingly, of three pairs of native and denatured proteins injected into Xenopus laevis oocytes, only the denatured derivs. induced expression of a reporter gene from a heat shock promoter (Ananthan, J., et al., 1986). These observations are extended here. Protein denaturation per se is shown to be insufficient for heat shock induction; although reduced and carboxymethylated **bovine** serum albumin (rcm-BSA) and **.alpha.-crystallin** elicited a stress response, many other denatured proteins had no effect. Methylation of protein lysines, done to **prevent** ubiquitination, suppressed heat shock induction by rcm-BSA, but enhanced induction by .alpha.-crystallin. Thus, the potential for a protein to be ubiquitinated is independent of its ability to induce the stress response. Instead, aggregation distinguished the proteins that were effective stress inducers, and the formation of large aggregates correlated with the magnitude of the response. This correlation may derive in part from decreased in vivo **degrdn**. rates of the inducer proteins. An apparent requirement for stress response induction that the inducer proteins be injected directly into the oocyte nucleus may relate to this issue of in vivo stability. The dependence of the stress response on the amt. of injected protein is nonstress response on the amt. of injected protein is nonlinear and of a form consistent with the titrn. of a factor that otherwise suppresses heat shock gene expression.

L72 ANSWER 14 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 94268098 EMBASE
DOCUMENT NUMBER: 1994268098
TITLE: A comparison of the **inhibition** of porcine pancreatic elastase and human neutrophil elastase by alpha-crystallin.
AUTHOR: Ortwerth B.J.; Krishna Sharma K.; Olesen P.R.
CORPORATE SOURCE: Mason Institute of Ophthalmology, University of Missouri, One Hospital Drive,Columbia, MO 65212, United States
SOURCE: Current Eye Research, (1994) 13/8 (561-567).
ISSN: 0271-3683 CODEN: CEYRDM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 012 Ophthalmology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB **Bovine** lens **.alpha.-crystallin** **inhibited** both porcine pancreatic elastase (PPE) and human neutrophil elastase (HNE), but not in the same manner. PPE was immediately **inhibited** with a stoichiometry of 10 moles of PPE **inhibited** per mole of **.alpha.-crystallin**. The **inhibition** was markedly decreased by the addition of even low

levels of salts. The **inhibition** was transient, as PPE activity returned to normal with a t(1/2) of 30 min even in low salt. HNE required a short preincubation to show maximum **inhibition** with a stoichiometry of approximately one mole of HNE **inhibited** per mole of .**alpha**.-**crystallin**. The **inhibition** of HNE was only slightly decreased by the addition of 0.1 M salt, and HNE activity returned slowly exhibiting a t(1/2) of 30 hrs under these conditions. The **inhibition** of each enzyme by .**alpha**.-**crystallin** was evaluated by Dixon plots giving K(i) values of 1.5 nM for PPE and 0.25 nM for HNE. DFP-trypsin was able to compete with PPE for binding to .**alpha**.-**crystallin** and cause the release of PPE already bound to .**alpha**.-**crystallin**. The **inhibition** of HNE, however, was unaffected by the addition of DFP-trypsin. A mixture of HNE and .**alpha**.-**crystallin** in 0.1 M NaCl was incubated at 25.degree.C for 6 hours. Aliquots showed a slow, continuous cleavage of the .**alpha**.-**crystallin** subunits by SDS-PAGE, but little or no increase in HNE activity. A similar experiment with PPE in 0.1 M NaCl showed no **inhibition** and a significant cleavage of .**alpha**.-**crystallin** after only one minute of incubation. These data argue for distinct **inhibitory** mechanisms and binding sites for these two elastase enzymes.

L72 ANSWER 15 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1992:332584 BIOSIS
DOCUMENT NUMBER: BA94:34425
TITLE: THE EFFECT OF UREA ON THE AGGREGATE STATE AND ELASTASE **INHIBITOR** ACTIVITY OF THE WATER-INSOLUBLE FRACTION FROM BOVINE AND HUMAN LENS.
AUTHOR(S): ORTWERTH B J; SHARMA K K; OLESEN P R
CORPORATE SOURCE: MASON INST. OPHTHALMOL., DEP. BIOCHEM., UNIV. MO., COLUMBIA, MO. 65212.
SOURCE: EXP EYE RES, (1992) 54 (4), 573-581.
CODEN: EXERA6. ISSN: 0014-4835.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Preparations of .**alpha**.-**crystallin** from **bovine** and human lens exhibited elastase **inhibitor** activity with a specific activity of 100-250 U mg-1 protein. A washed water-insoluble fraction from **bovine**, human and cataractous lens nuclei, when solubilized by sonication, gave specific activities of 910, 950 and 1270 U mg-1, respectively. Disaggregation of these water-insoluble fractions in 8.0 M urea, with subsequent reaggregation by urea removal, resulted in a decrease in **inhibitor** activity. Agarose A-5m gel filtration chromatography after the urea treatment resolved a residual high molecular weight (HMW) fraction and a peak which eluted at the position of water soluble .**alpha**.-**crystallin**. Assays showed that the urea-induced '.**alpha**.-**crystallin**' peaks from all three preparations had specific activities, equivalent to native .**alpha**.-**crystallin**, whereas the HMW fractions retained their original high specific activity. We conclude that the increased elastase **inhibitor** activity of the water-insoluble fraction is a property of the aggregate state of the component .**alpha**.-**crystallin** molecules, which is lost upon reaggregation to an 800-kDa .**alpha**.-**crystallin**. Amino acid analysis of the **bovine** water-insoluble fraction suggested a content of 85-90% .**alpha**.-**crystallin** and 10-15 .beta.H-crystallin, which was confirmed by SDS-PAGE. The urea-induced '.**alpha**.-**crystallin**' peak had an amino acid composition which was almost identical to that of water-soluble .**alpha**.-**crystallin** except for a 20% decrease in serine. The water-insoluble sonicate supernatant (WISS) fractions from normal human and cataractous lens nuclei had identical amino acid compositions, which were most similar to .**alpha**.-**crystallin** but as much as 30-40% of the WISS fraction was derived from other crystallins. The high .**alpha**.-**crystallin** content of the human water-insoluble fraction was

confirmed by the D2 spectrum of the sonication solubilized proteins. In spite of the fact that these proteins are extensively cross-linked, and contain low molecular weight peptides as well as other crystallins, these solubilized WI proteins reassembled into .**alpha**.-**crystallin**-sized molecules after dissociation by urea.

L72 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 6
ACCESSION NUMBER: 1992:146643 CAPLUS
DOCUMENT NUMBER: 116:146643
TITLE: Characterization of the elastase **inhibitor** properties of .**alpha**.-**crystallin** and the water-insoluble fraction from **bovine** lens
AUTHOR(S): Ortwerth, B. J.; Olesen, P. R.
CORPORATE SOURCE: Mason Inst. Ophthalmol., Univ. Missouri, Columbia, MO, 65212, USA
SOURCE: Experimental Eye Research (1992), 54(1), 103-11
CODEN: EXERA6; ISSN: 0014-4835
DOCUMENT TYPE: Journal
LANGUAGE: English
AB .alpha.-Crystallin exhibits variable **inhibition** of several members of the chymotrypsin family of proteinases. Complete **inhibition** of elastase was obtained by the addn. of either .**alpha**.-**crystallin** or a sonicated prepn. of the water-insol. fraction from **bovine** lens. Little or no **inhibition** was seen, however, with either .beta.-crystallin or bovine serum albumin under the same conditions. Complete binding of elastase was demonstrated by Sephadex G-100 gel filtration chromatog., and a direct correlation between binding and **inhibition** was obtained. This observation permitted a Scatchard anal. of the **inhibition** data. Scatchard plots for the binding of elastase gave a biphasic response suggesting two sep. binding sites. These sites had Kd values of 15 and 40 nM for .**alpha**.-**crystallin** and 6 and 42 nM for the **bovine** lens water-insol. fraction. Similarly, a Dixon plot exhibited a Ki value of 3 nM and was consistent with non-competitive **inhibition**. One mole of .alpha.-crystallin (8 .times. 105 Da), or an equiv. amt. of water-insol. protein, bound 13-19 mol of elastase and were about equally divided between the high and low affinity sites. Satn. studies confirmed 20 and 16 elastase binding sites per 8 .times. 105 Da for .alpha.-crystallin and water-insol. protein, resp. DFP-elastase (DFP = diisopropyl fluorophosphate) was able to bind to .alpha.-crystallin, suggesting that proteolytic cleavage was not required for complex formation. Stability measurements showed a linear return to 60% of the original activity over a 30-min period. Therefore, the interaction between elastase and .alpha.-crystallin resembles that of a heterologous **protease**:**inhibitor** complex in both binding and stability.

L72 ANSWER 17 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 91111109 EMBASE
DOCUMENT NUMBER: 1991111109
TITLE: Effect of FGFs on adult bovine Muller cells: Proliferation, binding and internalization.
AUTHOR: Mascarelli F.; Tassin J.; Courtois Y.
CORPORATE SOURCE: INSERM U 118-CNRS UA 630, Association Claude Bernard, Unite de Recherches Gerontologiques, 29 Rue Wilhem, 75016 Paris, France
SOURCE: Growth Factors, (1991) 4/2 (81-95).
ISSN: 0897-7194 CODEN: GRFAEC
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 021 Developmental Biology and Teratology
029 Clinical Biochemistry
037 Drug Literature Index
LANGUAGE: English

SUMMARY LANGUAGE: English

AB A new method for culturing retinal Muller cells from adult **bovine** tissue is described. The identification of these glial cells was based on immunocytochemical analysis of specific Muller cell markers. Cultured cells from fourth to ninth passage showed positive labelling for S 100 protein, carbonic anhydrase (CAA), glutamine synthetase (GS), . **alpha. crystallin** (.alpha.C) and polyclonal glial fibrillary acidic protein (GFAP) antibody, but were negative for both monoclonal GFAP antibody and also for Muller cells in the retina. Investigation of the effect of acidic fibroblast growth factor (aFGF), basic fibroblast growth factor (bFGF), and epithelial growth factor (EGF) on the proliferation of the Muller cells revealed that bFGF was the most potent mitogen (EC50 = 14 pM). Binding data revealed the presence of two classes of binding sites for aFGF and bFGF: (1) a high affinity binding site (Kd of 14 pM and 27 pM for aFGF and bFGF respectively); (2) a low affinity binding site (Kd of 3.2 nM and 0.6 nM for aFGF and bFGF respectively with great variability in the number of binding sites). In addition, the cross-linking experiments revealed the presence of high molecular weight FGF receptors (110-140 kDa). After aFGF or bFGF binding to Muller cells, aFGF and bFGF-cell surface receptors were rapidly downregulated with a half-life for disappearance of 35-50 min. Internalization and **degradation** of 125I-bFGF bound to the Muller cell receptors did not occur at 4.degree.C. At 37.degree.C, however, there was a rapid decrease in receptor-bound 125I-bFGF due to the downregulation of bFGF receptors. Concomitantly 125I-bFGF appeared inside the Muller cells. After 2 h, 125I-bFGF began to be degraded and after 6 h three fragments of 16 kDa, 8 kDa nd 5.5 kDa were discernible. **Degradation** of bFGF appeared to occur in the lysosomal compartment since it was **inhibited** by chloroquine, an **inhibitor** of lysosomal **proteases**; aFGF internalization and **degradation** followed the same kinetics as bFGF with the appearance of 7 kDa and 5 kDa fragments. These results suggest that Muller cells may be the target for aFGF and bFGF contained in other cells of the retina. The fact that aFGF could be released from rod outer segment by a phosphorylation-dependent mechanism and that apical prolongation of the Muller cells is connected with the photoreceptor cells suggest that these factors may be the mediators involved in the communication between glial cells and neurons.

L72 ANSWER 18 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 7

ACCESSION NUMBER: 1991:210162 BIOSIS
DOCUMENT NUMBER: BA91:113387
TITLE: CALPAIN IN CULTURED BOVINE LENS EPITHELIAL CELLS.
AUTHOR(S): LIPMAN R D; CYR D E; DAVID L L; TAYLOR A
CORPORATE SOURCE: LAB. NUTRITION VISION RES., USDA HUMAN NUTRITION RES. CENT. AGING TUFTS UNIV., 711 WASHINGTON ST., BOSTON, MASS. 02111.
SOURCE: CURR EYE RES, (1991) 10 (1), 11-18.
CODEN: CEYRDM. ISSN: 0271-3683.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB Calcium dependent **proteolysis** was examined in supernatant prepared from cultured **bovine** lens epithelial (BLE) cells. The presence of the calcium activated **protease**, calpain, was indicated by immunorecognition of 80 kDa and 30 kDa subunits of calpain in BLE cell supernatant. **Degradation** of 125I-**alpha-crystallin** and FITC labeled casein by BLE cell supernatant were shown to be calcium dependent. **Inhibition** of activity was achieved with EGTA, calpastatin or CbzValPheH. The data presented are the first measurement of calpain activity in cultured lens cells.

L72 ANSWER 19 OF 26 MEDLINE

ACCESSION NUMBER: 90256007 MEDLINE
DOCUMENT NUMBER: 90256007 PubMed ID: 2341052
TITLE: Lens proteasome shows enhanced rates of **degradation**

of hydroxyl radical modified alpha-crystallin.
AUTHOR: Murakami K; Jahngen J H; Lin S W; Davies K J; Taylor A
CORPORATE SOURCE: USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA 02111.
CONTRACT NUMBER: ES 03598 (NIEHS)
SOURCE: FREE RADICAL BIOLOGY AND MEDICINE, (1990) 8 (3) 217-22. Journal code: 8709159. ISSN: 0891-5849.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199006
ENTRY DATE: Entered STN: 19900720
Last Updated on STN: 20000303
Entered Medline: 19900628

AB Proteasome, a high molecular weight **protease** complex (HMP, approximately 600 kDa) was isolated from **bovine** eye lens epithelium tissue. In contrast with prior reports, lens proteasome degraded the major lens protein **alpha-crystallin** and S-carboxymethylated **bovine** serum albumin at 37 degrees C, mostly to trichloroacetic acid precipitable polypeptides. The proteasome, thus isolated, was labile at 55 degrees C. As indicated by the ability of p-chloromercuribenzoate and N-ethylmaleimide to block activity, a thiol group is required for activity. **Alpha-crystallin** was oxidized by exposure to 60Co-irradiation under an atmosphere of N2O (1-50 kilorads). This dose delivered 0.1-5.7 mol of hydroxyl radicals per mol of crystallin. Irradiation resulted in increased heterogeneity, aggregation, and fragmentation of the crystallin preparation. The proteolytic susceptibility of **alpha-crystallin** to the lens HMP was enhanced by the irradiation in a dose-dependent manner up to 20 kilorads (.OH concentration up to 2.3 mol per mol of **alpha-crystallin**). When 50 kilorads (5.7 mol .OH per mol of **alpha-crystallin**) was used, there was extensive aggregation and no enhancement in **proteolysis** over the unirradiated sample. The data indicate that the lens HMP can degrade mildly photooxidized lens proteins, but proteins which are extensively damaged are not degraded and may accumulate. This may be related to cataract formation.

L72 ANSWER 20 OF 26 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 85251602 MEDLINE
DOCUMENT NUMBER: 85251602 PubMed ID: 3893422
TITLE: Differential **inhibition** of two proteolytic activities in bovine lens neutral-proteinase preparations.
AUTHOR: Wagner B J; Margolis J W; Abramovitz A S; Fu S C
SOURCE: BIOCHEMICAL JOURNAL, (1985 Jun 1) 228 (2) 517-9. Journal code: 2984726R. ISSN: 0264-6021.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198508
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 20000303
Entered Medline: 19850821

AB Hydrolysis of carbobenzoxy-Leu-Leu-Glu 2-naphthylamide by **bovine** lens neutral-proteinase preparations is not affected by the esterase **inhibitor** di-isopropyl fluorophosphate, whereas hydrolysis of carbobenzoxy-Gly-Gly-Leu p-nitroanilide is completely **inhibited**. Hydrolysis of **alpha-crystallin**, a lens structural protein, can be **inhibited** by only 50% after prolonged treatment with di-isopropyl fluorophosphate. These data suggest that the lens neutral-proteinase preparation contains at least two enzymes, one of which may be a serine proteinase. This may account, in part, for the previously observed complex response of the preparation to **inhibitors**.

L72 ANSWER 21 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1985:338530 BIOSIS
DOCUMENT NUMBER: BA80:8522
TITLE: CALCIUM-DEPENDENT CYSTEINE PROTEINASE CALPAIN IN BOVINE LENS **DEGRADATION** OF LENS STRUCTURAL PROTEINS.
AUTHOR(S): YOSHIDA H; MURACHI T; TSUKAHARA I
CORPORATE SOURCE: DEP. OPHTHALMOL., FAC. MED., KYOTO UNIV., 53 SHOGOINKAWARA-CHO, SAKYO-KU, KYOTO 606, JPN.
SOURCE: ACTA SOC OPHTHALMOL JPN, (1985) 89 (1), 227-229. CODEN: NGZAA6. ISSN: 0029-0203.
FILE SEGMENT: BA; OLD
LANGUAGE: Japanese
AB Several urea-soluble lens proteins are good substrates of Ca2+-dependent cysteine proteinase (calpain) [EC 3.4.22.77] in **bovine** lens. The calpain-catalyzed **proteolysis** at 1 mM Ca2+ occurred with the proteins ranging from 40-200 kDa [kilo Daltons] which included actin (MW 43,000) and vimentin (MW 57,000). The **proteolysis** was **inhibited** by EGTA [ethylene glycol bis(.beta.-aminoethyl ether) N,N,N',N'-tetracetic acid] monoiodoacetic acid, E-46c [L-trans-epoxysuccinyl-L-leucylamido (3-methyl) butane], leupeptin [acetyl-L-leucyl-L-leucy-L-arginnal] and calpastatin (an endogenous specific **inhibitor** of calpain). Since calpain proteolyzed . **alpha.-crystallin**, calpain may play some role in in vivo **degradation** of various structural proteins in the lens.

L72 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 9
ACCESSION NUMBER: 1984:402891 CAPLUS
DOCUMENT NUMBER: 101:2891
TITLE: Limited **proteolysis** of **bovine** lens **.alpha.-crystallin** by calpain, a calcium-dependent cysteine proteinase, isolated from the same tissue
AUTHOR(S): Yoshida, Haruko; Murachi, Takashi; Tsukahara, Isamu
CORPORATE SOURCE: Fac. Med., Kyoto Univ., Kyoto, 606, Japan
SOURCE: Biochim. Biophys. Acta (1984), 798(2), 252-9 CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Calpain (EC 3.4.22.17) (I) was found in the cytosolic fraction of bovine lens and purified to apparent homogeneity. Purified I required 1 mM Ca2+ for full activation and was composed of 2 subunits of mol. wt. 80,000 and 29,000 as demonstrated by SDS-polyacrylamide gel electrophoresis. I, when activated by Ca2+, degraded both A- and B-chains of **.alpha.-crystallin**, which were also isolated from **bovine** lens. SDS-gel electrophoresis of the digest revealed that the A-chain (mol. wt. = 19,500) was degraded to produce an 18-kilodalton (kDa) polypeptide fragment and the B-chain (mol. wt. = 22,500) to produce a 19.5-kDa polypeptide fragment. No further cleavage, occurred even on prolonged incubation or after the 2nd addn. of the enzyme, indicating the uniquely limited **proteolysis** of each chain protein. The existence of calpastatin, the endogenous **inhibitor** protein specific for I, was also demonstrated in bovine lens cytosol.

L72 ANSWER 23 OF 26 MEDLINE
ACCESSION NUMBER: 84108733 MEDLINE
DOCUMENT NUMBER: 84108733 PubMed ID: 6363110
TITLE: Isolation and characterization of a 25K serine proteinase from bovine lens cortex.
AUTHOR: Srivastava O P; Ortwerth B J
CONTRACT NUMBER: EY 02035 (NEI)
SOURCE: EXPERIMENTAL EYE RESEARCH, (1983 Dec) 37 (6) 597-612. Journal code: 0370707. ISSN: 0014-4835.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198403
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 20000303
Entered Medline: 19840323

AB A lens serine proteinase with trypsin-like specificity has been purified to homogeneity. This is one of two serine proteinases associated with the **alpha-crystallin** fraction from **bovine** lens.
The purification was accomplished by a combination of isoelectric precipitation, activation to release the proteinase, gel-filtration and affinity chromatography. The purified proteinase showed a single protein band of 25 000 daltons on SDS-PAGE. A single protein band was also seen on non-denaturing gels which correlated with the location of the proteinase activity. The proteinase had a pH optimum between 7.2 and 8.2, was stable between pH 5.8 and 8.6 but was unstable above 40 degrees C upon heating. The enzyme lacked any requirement for metal ions and hydrolyzed arginine, lysine and asparagine substrates. **alpha-Crystallin,**
and especially the B-chain of alpha-crystalline, was rapidly hydrolyzed by the proteinase compared to other lens crystallins. Metallo- and cysteine-proteinase **inhibitors** had no effect upon the enzyme activity whereas three different serine-proteinase **inhibitors** completely abolished all activity. A number of protein and peptide trypsin **inhibitors** also completely **inhibited** the lens 25K serine proteinase.

L72 ANSWER 24 OF 26 MEDLINE
ACCESSION NUMBER: 83157892 MEDLINE
DOCUMENT NUMBER: 83157892 PubMed ID: 6403363
TITLE: Purification and properties of a protein from bovine lens which **inhibits** trypsin and two endogenous lens proteinases.
AUTHOR: Srivastava O P; Ortwerth B J
CONTRACT NUMBER: EY 02035 (NEI)
SOURCE: EXPERIMENTAL EYE RESEARCH, (1983 Mar) 36 (3) 363-79.
Journal code: 0370707. ISSN: 0014-4835.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198305
ENTRY DATE: Entered STN: 19900318
Last Updated on STN: 19970203
Entered Medline: 19830527

AB An **inhibitor** of trypsin-like proteinases was isolated from the water-soluble proteins of **bovine** lens cortex. The **inhibitor** was purified by four simple procedures: the separation of the **inhibitor** fraction by Agarose A-1.5 m gel filtration, extraction with 2.5% TCA at 70 degrees C, ammonium sulfate precipitation of the TCA-soluble proteins and a final separation by gel filtration chromatography. This preparation was found to be homogeneous by SDS-PAGE with an approximate subunit molecular weight of 5500 daltons. Gel filtration separated the ammonium sulfate precipitate into an inactive high-molecular-weight peak which eluted in the void volume, and two peaks of approximately 40 000 daltons and 10 000 daltons. Both low-molecular-weight peaks gave a single 5500 dalton band on SDS-PAGE, but only the 40 000 dalton peak was active when concentrated and assayed with **bovine** trypsin. These data suggest that the **inhibitor** is present in multimeric forms in solution, but only the octamer appears to be active. Antibodies prepared against the purified **inhibitor** showed a single precipitin line, while no reaction was seen with an **alpha-crystallin** antiserum. Upon storage in solution all of the **inhibitor** became converted into a high-molecular-weight form which was completely inactive. SDS-PAGE dissociated the **inhibitor** aggregate into a major 44 000 dalton band along with

several minor bands. Amino acid analysis showed that the purified **inhibitor** contains a very high content of hydrophobic residues. The lens **inhibitor** was effective in reducing the activity of trypsin, but complete **inhibition** was not seen even at high **inhibitor** levels. A rapid and complete **inhibition** was observed, however, with two endogenous trypsin-like proteinases isolated from the **alpha-crystallin** region.

L72 ANSWER 25 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 77110432 EMBASE
DOCUMENT NUMBER: 1977110432
TITLE: Neutral proteinase activity in the human lens.
AUTHOR: Trayhurn P.; Van Heyningen R.
CORPORATE SOURCE: Nuffield Lab. Ophthalmol., Univ. Oxford, United Kingdom
SOURCE: Experimental Eye Research, (1976) 22/3 (251-257).
CODEN: EXERA6
DOCUMENT TYPE: Journal
FILE SEGMENT: 012 Ophthalmology
029 Clinical Biochemistry
LANGUAGE: English
AB Enzymes associated with protein breakdown have been investigated in the human lens. A neutral proteinase has been found with properties similar to the **bovine** lens enzyme (Blow, van Heyningen and Barrett, 1975). It is maximally active at pH 7.5, stable for many hours at 55.degree.C, activated by Mg2+ and Ca2+ and **inhibited** by EDTA. It is active against bulk human lens proteins and **bovine** lens **.alpha** . **crystallin** but has little or no activity against haemoglobin, azocasein or **bovine** plasma albumin. The neutral proteinase appears to be the main, or only, proteinase in the normal and cataractous human lens; we were unable to find the proteinase with maximal activity at pH 5.2 described by Swanson and Nichols (1971). Neither leucine aminopeptidase nor carboxypeptidase A activity could be detected in the human lens.

L72 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 10
ACCESSION NUMBER: 1975:27850 CAPLUS
DOCUMENT NUMBER: 82:27850
TITLE: Trypsin and chymotrypsin **inhibitory** capacity of human and **bovine** **.alpha.-crystallin**
AUTHOR(S): Gaudin, Julien; Stevens, Frits C.
CORPORATE SOURCE: Fac. Med., Univ. Manitoba, Winnipeg, Manitoba, Can.
SOURCE: FEBS Lett. (1974), 48(1), 72-5
CODEN: FEBLAL
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Crude homogenates from bovine and human cataractous lenses, were able to **inhibit** trypsin and, to a lesser extent, chymotrypsin. The **inhibitory** activity was assocd. with the .alpha.-crystallin fraction of the lens. Aggregates of urea-denatured .alpha.-crystallin or of its acidic (.alpha.A1,.alpha.A2) or basic (.alpha.B1,.alpha.B2) components **inhibited** trypsin at least 5-fold more strongly than did native .alpha.-crystallin. The chymotrypsin **inhibitory** activity of .alpha.-crystallin was much weaker than its trypsin **inhibitory** activity and could not be increased by urea treatment or sepn. into the component acidic and basic polypeptide chains.

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INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
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L2    QUE L1

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L3    QUE SOLUBLE AND (PROTEASE OR PROTEOLYSIS ) AND (BOVINE (W) ALPHA (W) CRYST
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COPYRIGHT (C) 2002 IFI CLAIMS(R) Patent Services (IFI)

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CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 14:07:34 ON 28 OCT 2002
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'PCTFULL' ENTERED AT 14:07:34 ON 28 OCT 2002
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L5            1 FILE USPATFULL
L6            1 FILE WPIDS
L7            1 FILE PCTFULL

TOTAL FOR ALL FILES
L8            4 L3

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L8   ANSWER 1 OF 4  IFIPAT  COPYRIGHT 2002 IFI
AN                      10198679  IFIPAT;IFIUDB;IFICDB
TITLE:                  METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND
                        SOLUBILITY
INVENTOR(S):            Sanders; Mitchell C., Leicester, MA, US
PATENT ASSIGNEE(S):     Unassigned
AGENT:                  HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA
                        ROAD, P.O. BOX 9133, CONCORD, MA 01742-9133, US

                           NUMBER          PK    DATE
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PATENT INFORMATION:     US 2002142384     A1  20021003
APPLICATION INFORMATION: US 2001-848780       20010503

                           NUMBER               DATE
                        ----------------     --------
                        US 2000-201407P20000503 (Provisional)
FAMILY INFORMATION:     US 2002142384        20021003
DOCUMENT TYPE:          Utility
                        Patent Application - First Publication
FILE SEGMENT:           CHEMICAL
                        APPLICATION

                        GOVERNMENT INTEREST:
(0001) Part of this invention was made with government support under GM59535-01
```

awarded by the National Institute of Health under the Small Business Innovative Research (SBIR) Program. The U.S. Government has certain rights in this invention.
NUMBER OF CLAIMS: 5 8 Figure(s).

DESCRIPTION OF FIGURES:
FIG. 1 shows a plasmid map for the Vector System DNA construct.
FIG. 2 is a representation of a pre-column filter placed in series with a resolving column such as a gel filtration or an ion exchange column.
FIG. 3 is a digital image of an SDS PAGE gel showing purified BCpepsinogen.
FIG. 4 shows a digital image of a 12% SDS PAGE gel of p26 protein purified by nickel affinity chromatography resin. Because p26 is a multi-oligomer, it has a tendency to elute over several fractions, even when a sharp gradient is provided. Fractions identified using the SDS gel and containing p26 are dialyzed into Pipes magnesium buffer (20 mM Pipes pH 7.0, 1 mM MgCl2). Following dialysis the target protein was stored at-20 degrees C. and used in less than 1 week for kinetic assays and chromatography experiments.
FIG. 5A shows the chromatograph of purified alpha-crystallin.
FIG. 5B provides a digital image of an SDS PAGE gel of purified alpha-crystallin.
FIG. 6 provides a graph that shows the inhibition of elastase activity with alpha-crystallin. Elastase activity was measured using a para-nitroanaline substrate obtained from Calbiochem (La Jolla, Calif.). Assays were performed with a Benchmark microplate reader (Bio-Rad). Elastase was purchased from either Sigma or Calbiochem. In a 100 mu l assay 50 mu g of peptide substrate, 1 mu g of elastase, and 50-100 mu g of either uncoupled p26, alpha-crystallin conjugated sepharose, BSA conjugated sepharose, or buffer (negative control) was used.
FIG. 7 is a graph that illustrates the NaCl dependency of alphacrystallin in inhibiting elastase activity. One mu g of elastase was incubated with 5 mu l of alpha-crystallin conjugated sepharose in the presence of 0-200 mM NaCl. Increasing the NaCl concentration reduced the ability of alphacrystallin to inhibit elastase activity.
AB A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac Iq). The **soluble** recombinant protein is purified using a fusion tag.
CLMN 5 8 Figure(s).
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FIG. 2 is a representation of a pre-column filter placed in series with a resolving column such as a gel filtration or an ion exchange column.
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FIG. 4 shows a digital image of a 12% SDS PAGE gel of p26 protein purified by nickel affinity chromatography resin. Because p26 is a multi-oligomer, it has a tendency to elute over several fractions, even when a sharp gradient is provided. Fractions identified using the SDS gel and containing p26 are dialyzed into Pipes magnesium buffer (20 mM Pipes pH 7.0, 1 mM MgCl2). Following dialysis the target protein was stored at-20 degrees C. and used in less than 1 week for kinetic assays and chromatography experiments.
FIG. 5A shows the chromatograph of purified alpha-crystallin.
FIG. 5B provides a digital image of an SDS PAGE gel of purified alpha-crystallin.
FIG. 6 provides a graph that shows the inhibition of elastase activity with alpha-crystallin. Elastase activity was measured using a para-nitroanaline substrate obtained from Calbiochem (La Jolla, Calif.). Assays were performed with a Benchmark microplate reader (Bio-Rad). Elastase was purchased from either Sigma or Calbiochem. In a 100 mu l assay 50 mu g of peptide substrate, 1 mu g of elastase, and 50-100 mu g of either uncoupled p26, alpha-crystallin conjugated sepharose, BSA

conjugated sepharose, or buffer (negative control) was used.
FIG. 7 is a graph that illustrates the NaCl dependency of alphacrystallin in inhibiting elastase activity. One mu g of elastase was incubated with 5 mu l of alpha-crystallin conjugated sepharose in the presence of 0-200 mM NaCl. Increasing the NaCl concentration reduced the ability of alphacrystallin to inhibit elastase activity.

L8 ANSWER 2 OF 4 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 2002:258814 USPATFULL |
| TITLE: | Method and device for improving protein stability and solubility |
| INVENTOR(S): | Sanders, Mitchell C., Leicester, MA, UNITED STATES |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002142384 | A1 | 20021003 |
| APPLICATION INFO.: | US 2001-848780 | A1 | 20010503 (9) |

| | NUMBER | DATE |
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| PRIORITY INFORMATION: | US 2000-201407P | 20000503 (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133 |
| NUMBER OF CLAIMS: | 5 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 7 Drawing Page(s) |
| LINE COUNT: | 506 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac I.sub.q). The **soluble** recombinant protein is purified using a fusion tag.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 4 WPIDS (C) 2002 THOMSON DERWENT

| | |
|---|---|
| ACCESSION NUMBER: | 2002-011413 [01] WPIDS |
| DOC. NO. CPI: | C2002-002972 |
| TITLE: | Improving stability and/or solubility of proteins expressed in vivo or in vitro. |
| DERWENT CLASS: | B04 D16 |
| INVENTOR(S): | SANDERS, M C |
| PATENT ASSIGNEE(S): | (EXPR-N) EXPRESSIVE CONSTRUCTS INC; (SAND-I) SANDERS M C |
| COUNTRY COUNT: | 95 |

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
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| WO 2001083804 | A2 | 20011108 | (200201)* | EN | 23 |

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AU 2001061242 A 20011112 (200222)

US 2002142384 A1 20021003 (200267)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
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| AU 2001061242 | A | AU 2001-61242 | 20010503 |
| US 2002142384 | A1 Provisional | US 2000-201407P | 20000503 |
| | | US 2001-848780 | 20010503 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
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| AU 2001061242 | A Based on | WO 200183804 |

PRIORITY APPLN. INFO: US 2000-201407P 20000503; US 2001-848780 20010503

AN 2002-011413 [01] WPIDS

AB WO 200183804 A UPAB: 20020105

NOVELTY - Methods for improving protein stability and/or solubility, are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a method (I) for producing a **soluble** and active recombinant protein comprising:

(a) inserting the p26 betas-core domain into a vector;

(b) inserting the insoluble protein domain into the vector directly after the p26 domain;

(c) inserting the vector into bacterial cells;

(d) growing the bacteria in a culture to an optical density (OD) of 0.8-1.0; and

(e) inducing the culture with IPTG;

(2) a method (II) for preventing unwanted **proteolysis** of a recombinant protein comprising:

(A) inserting **bovine alpha-crystallin** into a vector;

(B) inserting the protein of interest into a vector; and

(C) steps (c) to (e) from (I);

(3) a method for purifying native **bovine alpha-crystallin** protein comprising:

(a) homogenizing bovine eye lenses in a buffer;

(b) binding alpha-crystallin protein to a Q column;

(c) eluting the alpha-crystallin with a high salt; and

(d) separating the protein in 100 mM Glycine pH 2.5 on a Macroprep (RTM) column;

(4) a method of purifying recombinant alpha-crystallin type HIS-tagged proteins comprising:

(a) inserting the alpha-crystallin protein domain into a vector with the hexa-his tag;

(b) inserting the vector into bacterial cells and growing/inducing the cells;

(c) lyzing the cells and centrifuging out cell debris; and

(d) purifying the alpha-crystallin protein using an Ni-NTA column; and

(5) a method (V) for protecting a protein from **proteolysis** during purification, comprising:

(A) coupling purified **bovine alpha-crystallin** protein to a chromatography resin (CNBr-activated Sepharose (RTM) 4B or NHS-activated Sepharose 4B);

(B) rinsing and blocking the resin with BSA; and

(C) using the resin to purify the protein of choice.

USE - The methods are used to improve protein stability, folding and/or solubility when produced either in vivo or in vitro.

Dwg.0/7

L8 ANSWER 4 OF 4 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 2001083804 PCTFULL ED 20020826
TITLE (ENGLISH): A METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND SOLUBILITY
TITLE (FRENCH): METHODE ET DISPOSITIF POUR AMELIORER LA STABILITE ET LA SOLUBILITE DE PROTEINES
INVENTOR(S): SANDERS, Mitchell, C.
PATENT ASSIGNEE(S): EXPRESSIVE CONSTRUCTS, INC.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
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| | WO 2001083804 | A2 | 20011108 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US14692 A 20010503
PRIORITY INFO.: US 2000-60/201,407 20000503

ABEN A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. Coli is provided. Genes of interest are cloned into the multiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1mMIPTG that overcomes the lac repression (lac Iq). The **soluble** recombinant protein is purified using a fusion tag.

ABFR L'invention concerne une methode servant a exprimer des proteines en tant que chimere de fusion presentant un domaine proteique de type p26 ou alpha-crystallin, destinee a ameliorer la stabilite et la solubilite des proteines lorsqu'elles sont exprimees excessivement dans des bacteries telles que E. Coli. Des genes d'interet sont clones dans le site de clonage multiple du systeme vectorette pROTECT juste en aval de la proteine de type p26 ou alpha-crystallin et d'un site de clivage de thrombine. L'expression proteique est effectuee par un puissant promoteur bacterien (TAC). Cette expression est induite par l'addition de 1mMIPTG qui surmonte la repression de lac (lac Iq). La proteine recombinante **soluble** est purifiee au moyen d'un fragment de fusion.

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110 FILES IN THE FILE LIST IN STNINDEX

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crystallin)
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

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L4            1 FILE WPIDS
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L5 1 FILE PCTFULL

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L6 ANSWER 1 OF 4 IFIPAT COPYRIGHT 2002 IFI

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| AN | 10198679 IFIPAT;IFIUDB;IFICDB |
| TITLE: | METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND SOLUBILITY |
| INVENTOR(S): | Sanders; Mitchell C., Leicester, MA, US |
| PATENT ASSIGNEE(S): | Unassigned |
| AGENT: | HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA 01742-9133, US |

| | NUMBER | PK | DATE |
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| PATENT INFORMATION: | US 2002142384 | A1 | 20021003 |
| APPLICATION INFORMATION: | US 2001-848780 | | 20010503 |

| NUMBER | DATE |
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| US 2000-201407P | 20000503 (Provisional) |

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| FAMILY INFORMATION: | US 2002142384 20021003 |
| DOCUMENT TYPE: | Utility<br>Patent Application - First Publication |
| FILE SEGMENT: | CHEMICAL<br>APPLICATION |

GOVERNMENT INTEREST:

(0001) Part of this invention was made with government support under GM59535-01 awarded by the National Institute of Health under the Small Business Innovative Research (SBIR) Program. The U.S. Government has certain rights in this invention.

NUMBER OF CLAIMS: 5 8 Figure(s).

DESCRIPTION OF FIGURES:

FIG. 1 shows a plasmid map for the Vector System DNA construct.
FIG. 2 is a representation of a pre-column filter placed in series with a resolving column such as a gel filtration or an ion exchange column.
FIG. 3 is a digital image of an SDS PAGE gel showing purified BCpepsinogen.
FIG. 4 shows a digital image of a 12% SDS PAGE gel of p26 protein purified by nickel affinity chromatography resin. Because p26 is a multi-oligomer, it has a tendency to elute over several fractions, even when a sharp gradient is provided. Fractions identified using the SDS gel and containing p26 are dialyzed into Pipes magnesium buffer (20 mM Pipes pH 7.0, 1 mM MgCl2). Following dialysis the target protein was stored at-20 degrees C. and used in less than 1 week for kinetic assays and chromatography experiments.
FIG. 5A shows the chromatograph of purified alpha-crystallin.
FIG. 5B provides a digital image of an SDS PAGE gel of purified alpha-crystallin.
FIG. 6 provides a graph that shows the inhibition of elastase activity with alpha-crystallin. Elastase activity was measured using a para-nitroanaline substrate obtained from Calbiochem (La Jolla, Calif.). Assays were performed with a Benchmark microplate reader (Bio-Rad). Elastase was purchased from either Sigma or Calbiochem. In a 100 mu l assay 50 mu g of peptide substrate, 1 mu g of elastase, and 50-100 mu g of either uncoupled p26, alpha-crystallin conjugated sepharose, BSA conjugated sepharose, or buffer (negative control) was used.
FIG. 7 is a graph that illustrates the NaCl dependency of alphacrystallin in inhibiting elastase activity. One mu g of elastase was incubated with 5 mu l of alpha-crystallin conjugated sepharose in the presence of 0-200 mM NaCl. Increasing the NaCl concentration reduced the ability of alphacrystallin to inhibit elastase activity.

AB A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac Iq). The **soluble** recombinant protein is purified using a fusion tag.

CLMN 5 8 Figure(s).

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FIG. 2 is a representation of a pre-column filter placed in series with a resolving column such as a gel filtration or an ion exchange column.

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FIG. 4 shows a digital image of a 12% SDS PAGE gel of p26 protein purified by nickel affinity chromatography resin. Because p26 is a multi-oligomer, it has a tendency to elute over several fractions, even when a sharp gradient is provided. Fractions identified using the SDS gel and containing p26 are dialyzed into Pipes magnesium buffer (20 mM Pipes pH 7.0, 1 mM MgCl2). Following dialysis the target protein was stored at-20 degrees C. and used in less than 1 week for kinetic assays and chromatography experiments.

FIG. 5A shows the chromatograph of purified alpha-crystallin.

FIG. 5B provides a digital image of an SDS PAGE gel of purified alpha-crystallin.

FIG. 6 provides a graph that shows the inhibition of elastase activity with alpha-crystallin. Elastase activity was measured using a para-nitroanaline substrate obtained from Calbiochem (La Jolla, Calif.). Assays were performed with a Benchmark microplate reader (Bio-Rad). Elastase was purchased from either Sigma or Calbiochem. In a 100 mu l assay 50 mu g of peptide substrate, 1 mu g of elastase, and 50-100 mu g of either uncoupled p26, alpha-crystallin conjugated sepharose, BSA conjugated sepharose, or buffer (negative control) was used.

FIG. 7 is a graph that illustrates the NaCl dependency of alphacrystallin in inhibiting elastase activity. One mu g of elastase was incubated with 5 mu l of alpha-crystallin conjugated sepharose in the presence of 0-200 mM NaCl. Increasing the NaCl concentration reduced the ability of alphacrystallin to inhibit elastase activity.

L6 ANSWER 2 OF 4 USPATFULL

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 2002:258814 USPATFULL | | |
| TITLE: | Method and device for improving protein stability and solubility | | |
| INVENTOR(S): | Sanders, Mitchell C., Leicester, MA, UNITED STATES | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 2002142384 | A1 | 20021003 |
| APPLICATION INFO.: | US 2001-848780 | A1 | 20010503 (9) |
| | NUMBER | | DATE |
| PRIORITY INFORMATION: | US 2000-201407P | | 20000503 (60) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133 | | |
| NUMBER OF CLAIMS: | 5 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Page(s) | | |
| LINE COUNT: | 506 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability

and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac I.sub.q). The **soluble** recombinant protein is purified using a fusion tag.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 4 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2002-011413 [01] WPIDS
DOC. NO. CPI: C2002-002972
TITLE: Improving stability and/or solubility of proteins expressed in vivo or in vitro.
DERWENT CLASS: B04 D16
INVENTOR(S): SANDERS, M C
PATENT ASSIGNEE(S): (EXPR-N) EXPRESSIVE CONSTRUCTS INC; (SAND-I) SANDERS M C
COUNTRY COUNT: 95
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|---|---|---|---|---|
| WO 2001083804 | A2 | 20011108 | (200201)* | EN | 23 |

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

| | | | |
|---|---|---|---|
| AU 2001061242 | A | 20011112 | (200222) |
| US 2002142384 | A1 | 20021003 | (200267) |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---|---|---|---|
| WO 2001083804 | A2 | WO 2001-US14692 | 20010503 |
| AU 2001061242 | A | AU 2001-61242 | 20010503 |
| US 2002142384 | A1 Provisional | US 2000-201407P | 20000503 |
| | | US 2001-848780 | 20010503 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---|---|---|
| AU 2001061242 | A Based on | WO 200183804 |

PRIORITY APPLN. INFO: US 2000-201407P 20000503; US 2001-848780 20010503
AN 2002-011413 [01] WPIDS
AB WO 200183804 A UPAB: 20020105
NOVELTY - Methods for improving protein stability and/or solubility, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) a method (I) for producing a **soluble** and active recombinant protein comprising:
(a) inserting the p26 betas-core domain into a vector;
(b) inserting the insoluble protein domain into the vector directly after the p26 domain;
(c) inserting the vector into bacterial cells;
(d) growing the bacteria in a culture to an optical density (OD) of 0.8-1.0; and

(e) inducing the culture with IPTG;

(2) a method (II) for preventing unwanted **proteolysis** of a recombinant protein comprising:

(A) inserting **bovine alpha-crystallin** into a vector;

(B) inserting the protein of interest into a vector; and

(C) steps (c) to (e) from (I);

(3) a method for purifying native **bovine alpha-crystallin** protein comprising:

(a) homogenizing bovine eye lenses in a buffer;

(b) binding alpha-crystallin protein to a Q column;

(c) eluting the alpha-crystallin with a high salt; and

(d) separating the protein in 100 mM Glycine pH 2.5 on a Macroprep (RTM) column;

(4) a method of purifying recombinant alpha-crystallin type HIS-tagged proteins comprising:

(a) inserting the alpha-crystallin protein domain into a vector with the hexa-his tag;

(b) inserting the vector into bacterial cells and growing/inducing the cells;

(c) lyzing the cells and centrifuging out cell debris; and

(d) purifying the alpha-crystallin protein using an Ni-NTA column; and

(5) a method (V) for protecting a protein from **proteolysis** during purification, comprising:

(A) coupling purified **bovine alpha-crystallin** protein to a chromatography resin (CNBr-activated Sepharose (RTM) 4B or NHS-activated Sepharose 4B);

(B) rinsing and blocking the resin with BSA; and

(C) using the resin to purify the protein of choice.

USE - The methods are used to improve protein stability, folding and/or solubility when produced either in vivo or in vitro.

Dwg.0/7

L6 ANSWER 4 OF 4 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 2001083804 PCTFULL ED 20020826

TITLE (ENGLISH): A METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND SOLUBILITY

TITLE (FRENCH): METHODE ET DISPOSITIF POUR AMELIORER LA STABILITE ET LA SOLUBILITE DE PROTEINES

INVENTOR(S): SANDERS, Mitchell, C.

PATENT ASSIGNEE(S): EXPRESSIVE CONSTRUCTS, INC.

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001083804 | A2 | 20011108 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2001-US14692 | A | 20010503 |
| PRIORITY INFO.: | US 2000-60/201,407 | | 20000503 |

ABEN A method for expressing proteins as a fusion chimera with a domain of p26 or alpha crystallin type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. Coli is provided. Genes of interest are cloned into the multiple cloning site of the pROTECT Vector System just downstream of the p26 or alpha crystallin type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1mMIPTG that overcomes the lac repression (lac Iq). The

**soluble** recombinant protein is purified using a fusion tag.

ABFR L'invention concerne une methode servant a exprimer des proteines en tant que chimere de fusion presentant un domaine proteique de type p26 ou alpha-crystallin, destinee a ameliorer la stabilite et la solubilite des proteines lorsqu'elles sont exprimees excessivement dans des bacteries telles que E. Coli. Des genes d'interet sont clones dans le site de clonage multiple du systeme vectorette pROTECT juste en aval de la proteine de type p26 ou alpha-crystallin et d'un site de clivage de thrombine. L'expression proteique est effectuee par un puissant promoteur bacterien (TAC). Cette expression est induite par l'addition de 1mMIPTG qui surmonte la repression de lac (lac Iq). La proteine recombinante **soluble** est purifiee au moyen d'un fragment de fusion.

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=> s soluble and (proteolysis or degradation or proteolysed) and ( alpha  (w) crystallin)
L7           1 FILE IFIPAT
L8          34 FILE USPATFULL
L9           1 FILE WPIDS
L10         12 FILE PCTFULL

TOTAL FOR ALL FILES
L11         48 SOLUBLE AND (PROTEOLYSIS OR DEGRADATION OR PROTEOLYSED) AND
               (ALPHA (W) CRYSTALLIN)

=> dup rem l11
PROCESSING COMPLETED FOR L11
L12          46 DUP REM L11 (2 DUPLICATES REMOVED)

=> d l12 1-46 ibib abs

L12  ANSWER 1 OF 46  IFIPAT  COPYRIGHT 2002 IFI        DUPLICATE 1
AN                        10198679  IFIPAT;IFIUDB;IFICDB
TITLE:                    METHOD AND DEVICE FOR IMPROVING PROTEIN STABILITY AND
                          SOLUBILITY
INVENTOR(S):              Sanders; Mitchell C., Leicester, MA, US
PATENT ASSIGNEE(S):       Unassigned
AGENT:                    HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA
                          ROAD, P.O. BOX 9133, CONCORD, MA 01742-9133, US

                             NUMBER          PK    DATE
                          -----------------  --  --------
PATENT INFORMATION:       US 2002142384      A1  20021003
APPLICATION INFORMATION:  US 2001-848780         20010503

                             NUMBER               DATE
                          -----------------      --------
                          US 2000-201407P20000503 (Provisional)
FAMILY INFORMATION:       US 2002142384          20021003
DOCUMENT TYPE:            Utility
                          Patent Application - First Publication
FILE SEGMENT:             CHEMICAL
                          APPLICATION

                          GOVERNMENT INTEREST:
(0001) Part of this invention was made with government support under GM59535-01
awarded by the National Institute of Health under the Small Business Innovative
Research (SBIR) Program. The U.S. Government has certain rights in this
invention.
NUMBER OF CLAIMS:         5  8 Figure(s).

                          DESCRIPTION OF FIGURES:
FIG. 1 shows a plasmid map for the Vector System DNA construct.
FIG. 2 is a representation of a pre-column filter placed in series with a
resolving column such as a gel filtration or an ion exchange column.
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FIG. 3 is a digital image of an SDS PAGE gel showing purified BCpepsinogen.
FIG. 4 shows a digital image of a 12% SDS PAGE gel of p26 protein purified by nickel affinity chromatography resin. Because p26 is a multi-oligomer, it has a tendency to elute over several fractions, even when a sharp gradient is provided. Fractions identified using the SDS gel and containing p26 are dialyzed into Pipes magnesium buffer (20 mM Pipes pH 7.0, 1 mM MgCl2). Following dialysis the target protein was stored at-20 degrees C. and used in less than 1 week for kinetic assays and chromatography experiments.
FIG. 5A shows the chromatograph of purified **alpha-crystallin**
.
FIG. 5B provides a digital image of an SDS PAGE gel of purified **alpha -crystallin**.
FIG. 6 provides a graph that shows the inhibition of elastase activity with ***alpha*** **-crystallin**. Elastase activity was measured using a para-nitroanaline substrate obtained from Calbiochem (La Jolla, Calif.). Assays were performed with a Benchmark microplate reader (Bio-Rad). Elastase was purchased from either Sigma or Calbiochem. In a 100 mu l assay 50 mu g of peptide substrate, 1 mu g of elastase, and 50-100 mu g of either uncoupled p26, ***alpha*** **-crystallin** conjugated sepharose, BSA conjugated sepharose, or buffer (negative control) was used.
FIG. 7 is a graph that illustrates the NaCl dependency of alphacrystallin in inhibiting elastase activity. One mu g of elastase was incubated with 5 mu l of ***alpha*** **-crystallin** conjugated sepharose in the presence of 0-200 mM NaCl. Increasing the NaCl concentration reduced the ability of alphacrystallin to inhibit elastase activity.

AB A method for expressing proteins as a fusion chimera with a domain of p26 or **alpha crystallin** type proteins to improve the protein stability and solubility when over expressed in bacteria such as E. coli is provided. Genes of interest are cloned into the mutiple cloning site of the pROTECT Vector System just downstream of the p26 or **alpha crystallin** type protein and a thrombin cleavage site. Protein expression is driven by a strong bacterial promoter (TAC). The expression is induced by the addition of 1 mM IPTG that overcomes the lac repression (lac Iq). The **soluble** recombinant protein is purified using a fusion tag.

CLMN 5 8 Figure(s).

FIG. 1 shows a plasmid map for the Vector System DNA construct.
FIG. 2 is a representation of a pre-column filter placed in series with a resolving column such as a gel filtration or an ion exchange column.
FIG. 3 is a digital image of an SDS PAGE gel showing purified BCpepsinogen.
FIG. 4 shows a digital image of a 12% SDS PAGE gel of p26 protein purified by nickel affinity chromatography resin. Because p26 is a multi-oligomer, it has a tendency to elute over several fractions, even when a sharp gradient is provided. Fractions identified using the SDS gel and containing p26 are dialyzed into Pipes magnesium buffer (20 mM Pipes pH 7.0, 1 mM MgCl2). Following dialysis the target protein was stored at-20 degrees C. and used in less than 1 week for kinetic assays and chromatography experiments.
FIG. 5A shows the chromatograph of purified **alpha-crystallin**.
FIG. 5B provides a digital image of an SDS PAGE gel of purified **alpha-crystallin**.
FIG. 6 provides a graph that shows the inhibition of elastase activity with **alpha-crystallin**. Elastase activity was measured using a para-nitroanaline substrate obtained from Calbiochem (La Jolla, Calif.). Assays were performed with a Benchmark microplate reader (Bio-Rad). Elastase was purchased from either Sigma or Calbiochem. In a 100 mu l assay 50 mu g of peptide substrate, 1 mu g of elastase, and 50-100 mu g of either uncoupled p26, **alpha-crystallin** conjugated sepharose, BSA conjugated sepharose, or buffer (negative control) was used.
FIG. 7 is a graph that illustrates the NaCl dependency of alphacrystallin in inhibiting elastase activity. One mu g of elastase was incubated with 5 mu l of **alpha-crystallin** conjugated sepharose in

the presence of 0-200 mM NaCl. Increasing the NaCl concentration reduced the ability of alphacrystallin to inhibit elastase activity.

L12 ANSWER 2 OF 46 USPATFULL

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2002:280000 USPATFULL | | | |
| TITLE: | Hepatitis B virus treatment | | | |
| INVENTOR(S): | Mizzen, Lee A., Victoria, CANADA<br>Siegel, Marvin, Blue Bell, PA, UNITED STATES<br>Liu, Hongwei, Victoria, CANADA | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2002155434 | A1 | 20021024 | |
| APPLICATION INFO.: | US 2002-68059 | A1 | 20020205 | (10) |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2001-266733P | | 20010205 | (60) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | LEE CREWS, PH.D., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804 | | | |
| NUMBER OF CLAIMS: | 20 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| NUMBER OF DRAWINGS: | 20 Drawing Page(s) | | | |
| LINE COUNT: | 1452 | | | |

AB The invention relates to HBV antigen-containing compositions that are useful in treating or preventing HBV infection. The content of the compositions can vary, as described herein, but the compositions comprise a stress protein, or a portion (e.g., a fragment) or derivative thereof, and an HBV antigen.

L12 ANSWER 3 OF 46 USPATFULL

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2002:243567 USPATFULL | | | |
| TITLE: | Method for identifying compounds to treat medical pathologies associated with molecular crystallization | | | |
| INVENTOR(S): | Shell, John W., Hillsborough, CA, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2002132758 | A1 | 20020919 | |
| APPLICATION INFO.: | US 2002-52712 | A1 | 20020117 | (10) |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2001-262987P | | 20010118 | (60) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | REED & ASSOCIATES, 800 MENLO AVENUE, SUITE 210, MENLO PARK, CA, 94025 | | | |
| NUMBER OF CLAIMS: | 114 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| LINE COUNT: | 1620 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Numerous diseases and disorders are caused or exacerbated by the formation of crystalline aggregates of a biomolecule that is normally in solution. Such diseases and disorders include cataracts, sickle cell anemia, atherosclerosis, kidney stones, gallstones, gout, and Alzheimer's disease. The present invention provides methods to identify compounds that can inhibit the adverse formation of crystalline aggregates, including fibrils, of a target biomolecule. These methods include the screening of large combinatorial libraries. The identified compounds are tested for their therapeutic utility in treating medical conditions caused or exacerbated by the adverse crystallization of

biomolecules. Molecules that are slight modifications of the target biomolecule are found to be particularly effective in inhibiting the adverse crystallization, including fibril formation, of a target biomolecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 4 OF 46 USPATFULL

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2002:221323 USPATFULL | | | |
| TITLE: | Molecular toxicology modeling | | | |
| INVENTOR(S): | Mendrick, Donna L., Mount Airy, MD, UNITED STATES<br>Porter, Mark W., Germantown, MD, UNITED STATES<br>Johnson, Kory R., Bethesda, MD, UNITED STATES<br>Castle, Arthur L., Washington, DC, UNITED STATES<br>Elashoff, Michael R., Germantown, MD, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2002119462 | A1 | 20020829 | |
| APPLICATION INFO.: | US 2001-917800 | A1 | 20010731 | (9) |
| | NUMBER | DATE | | |
| PRIORITY INFORMATION: | US 2000-222040P | 20000731 | (60) | |
| | US 2000-244880P | 20001102 | (60) | |
| | US 2001-290029P | 20010511 | (60) | |
| | US 2001-290645P | 20010515 | (60) | |
| | US 2001-292336P | 20010522 | (60) | |
| | US 2001-295798P | 20010606 | (60) | |
| | US 2001-297457P | 20010613 | (60) | |
| | US 2001-298884P | 20010619 | (60) | |
| | US 2001-303459P | 20010709 | (60) | |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004 | | | |
| NUMBER OF CLAIMS: | 54 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| LINE COUNT: | 9801 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is based on the elucidation of the global changes in gene expression and the identification of toxicity markers in tissues or cells exposed to a known toxin. The genes may be used as toxicity markers in drug screening and toxicity assays. The invention includes a database of genes characterized by toxin-induced differential expression that is designed for use with microarrays and other solid-phase probes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 5 OF 46 USPATFULL

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2002:205879 USPATFULL | | | |
| TITLE: | Human papilloma virus treatment | | | |
| INVENTOR(S): | Neefe, John R., Devon, PA, UNITED STATES<br>Goldstone, Stephen E., New York, NY, UNITED STATES<br>Winnett, Mark T., Phoenixville, PA, UNITED STATES<br>Siegel, Marvin, Blue Bell, PA, UNITED STATES<br>Boux, Leslie J., Victoria, CANADA | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2002110566 | A1 | 20020815 | |
| APPLICATION INFO.: | US 2001-891823 | A1 | 20010626 | (9) |
| | NUMBER | DATE | | |

PRIORITY INFORMATION: US 2000-214202P 20000626 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LEE CREWS, PH. D., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
LINE COUNT: 1257
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a method of treating a wart in a subject by administering to the subject a composition containing (1) a heat shock protein or an immunostimulatory fragment thereof, and (2) a protein of a human papilloma virus or an antigenic fragment thereof. Also disclosed is a method of treating a human papilloma virus infection in a subject infected or suspected of being infected with a human papilloma virus of a first type by administering to the subject a composition containing (1) a heat shock protein or an antigenic fragment thereof, and (2) a protein of a human papilloma virus of a second type or an antigenic fragment thereof, where the first type and second type are different.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 6 OF 46 USPATFULL
ACCESSION NUMBER: 2002:191539 USPATFULL
TITLE: Full-length human cDNAs encoding potentially secreted proteins
INVENTOR(S): Milne Edwards, Jean-Baptiste Dumas, Paris, FRANCE
Bougueleret, Lydie, Petit Lancy, SWITZERLAND
Jobert, Severin, Paris, FRANCE

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002102604 | A1 | 20020801 |
| APPLICATION INFO.: | US 2000-731872 | A1 | 20001207 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1999-169629P | 19991208 (60) |
| | US 2000-187470P | 20000306 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: John Lucas, Ph.D., J.D., Genset Corporation, 10665 Srrento Valley Road, San Diego, CA, 92121-1609
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 28061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns GENSET polynucleotides and polypeptides. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 7 OF 46 USPATFULL
ACCESSION NUMBER: 2002:178550 USPATFULL
TITLE: Nucleic acid fragments and polypeptide fragments derived from M. tuberculosis
INVENTOR(S): Andersen, Peter, Bronshoj, DENMARK
Nielsen, Rikke, Frederiksberg C, DENMARK
Oettinger, Thomas, Hellerup, DENMARK

Rasmussen, Peter Birk, Kobenhaven O, DENMARK
Rosenkrands, Ida, Kobenhaven O, DENMARK
Weldingh, Karin, Kobenhaven N, DENMARK
Florio, Walter, Frederiksberg C, DENMARK
PATENT ASSIGNEE(S): STATENS SERUM INSTITUT (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002094336 | A1 | 20020718 |
| APPLICATION INFO.: | US 2001-791171 | A1 | 20010220 (9) |

RELATED APPLN. INFO.: Division of Ser. No. US 1998-50739, filed on 30 Mar 1998, PENDING

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DK 1997-376 | 19970402 |
| | DK 1997-1277 | 19971110 |
| | US 1997-44624P | 19970418 (60) |
| | US 1998-70488P | 19980105 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FROMMER LAWRENCE & HAUG LLP, 745 FIFTH AVENUE, NEW YORK, NY, 10151
NUMBER OF CLAIMS: 53
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 6134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is based on the identification and characterization of a number of M. tuberculosis derived novel proteins and protein fragments (SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16, 17-23, 42, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72-86, 88, 90, 92, 94, 141, 143, 145, 147, 149, 151, 153, and 168-171). The invention is directed to the polypeptides and immunologically active fragments thereof, the genes encoding them, immunological compositions such as vaccines and skin test reagents containing the polypeptides. Another part of the invention is based on the surprising discovery that fusions between ESAT-6 and MPT59 are superior immunogens compared to each of the unfused proteins, respectively.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 8 OF 46 USPATFULL
ACCESSION NUMBER: 2002:157089 USPATFULL
TITLE: Retinoid pathway assays, and compositions therefrom
INVENTOR(S): Kamb, Carl Alexander, Salt Lake City, UT, UNITED STATES
Richards, Burt Timothy, Midway, UT, UNITED STATES
Karpilow, Jon, Boulder, CO, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002081688 | A1 | 20020627 |
| APPLICATION INFO.: | US 2001-990747 | A1 | 20011116 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-812994, filed on 4 Mar 1997, GRANTED, Pat. No. US 5955275

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2000-249468P | 20001117 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Joseph A. Williams, Jr., MARSHALL, GERSTEIN, MURRAY & BORUN, 6300 Sears Tower, 233 South Wacker Drive, Chicago, IL, 60606-6402
NUMBER OF CLAIMS: 110

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Page(s)
LINE COUNT: 3714
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for assaying a cellular pathway, and more particularly a retinoic acid-related pathway, are disclosed. The assays of the invention utilize particular host cells with desired retinoic acid pathway elements, and results in the identification of biologically active phenotypic probes and cellular targets and fragments, variants and mimetics thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 9 OF 46 USPATFULL
ACCESSION NUMBER: 2002:16850 USPATFULL
TITLE: Human stress array
INVENTOR(S): Chenchik, Alex, Palo Alto, CA, UNITED STATES
Lukashev, Matvey E., Newton, MA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002009730 | A1 | 20020124 |
| APPLICATION INFO.: | US 2001-782909 | A1 | 20010213 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-441920, filed on 17 Nov 1999, UNKNOWN
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Bret E. Field, BOZICEVIC, FIELD & FRANCIS LLP, 200 Middlefield Road, Suite 200, Menlo Park, CA, 94025
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
LINE COUNT: 2377
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Human stress arrays and methods for their use are provided. The subject arrays include a plurality of polynucleotide spots, each of which is made up of a polynucleotide probe composition of unique polynucleotides corresponding to a human stress gene. The subject arrays find use in hybridization assays, particularly in assays for the identification of differential gene expression of human stress genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 10 OF 46 USPATFULL
ACCESSION NUMBER: 2002:8197 USPATFULL
TITLE: Synthetic transcriptional modulators and uses thereof
INVENTOR(S): Verdine, Gregory L., Lexington, MA, UNITED STATES
Nyanguile, Origene, Gaithersburg, MD, UNITED STATES
PATENT ASSIGNEE(S): President and Fellows of Harvard College (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002004195 | A1 | 20020110 |
| APPLICATION INFO.: | US 2000-751309 | A1 | 20001229 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-208057, filed on 9 Dec 1998, GRANTED, Pat. No. US 6183965 Continuation-in-part of Ser. No. US 1997-987912, filed on 9 Dec 1997, GRANTED, Pat. No. US 6153383
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY, HOAG & ELIOT, LLP, PATENT GROUP, ONE POST OFFICE SQUARE, BOSTON, MA, 02109
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT: 3196
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 11 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002081731 PCTFULL ED 20021028 EW 200242
TITLE (ENGLISH): NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
TITLE (FRENCH): NOUVEAUX ACIDES NUCLEIQUES ET POLYPEPTIDES
INVENTOR(S): TANG, Tom, Y.; LIU, Chenghua; ZHOU, Ping; ASUNDI, Vinod; ZHANG, Jie; ZHAO, Qing, A.; REN, Feiyan; XUE, Aidong, J.; YANG, Yonghong; WEHRMAN, Tom; WANG, Jian-Rui; WANG, Dunrui; DRMANAC, Radoje, T.
PATENT ASSIGNEE(S): HYSEQ, INC., for all designates States except US; GOODRICH, Ryle, W., for US only; TANG, Tom, Y., for US only; LIU, Chenghua, for US only; ZHOU, Ping, for US only; ASUNDI, Vinod, for US only; ZHANG, Jie, for US only; ZHAO, Qing, A., for US only; REN, Feiyan, for US only; XUE, Aidong, J., for US only; YANG, Yonghong, for US only; WEHRMAN, Tom, for US only; WANG, Jian-Rui, for US only; WANG, Dunrui, for US only; DRMANAC, Radoje, T., for US only
AGENT: HSI, Petrina, S.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002081731 | A2 | 20021017 |
| DESIGNATED STATES | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2002-US1222 | A | 20020129 |
| PRIORITY INFO.: | US 2001-09/774,528 | | 20010130 |

ABEN The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.
ABFR La presente invention concerne de nouveaux acides nucleiques, de nouvelles sequences polypeptidiques codees par ces acides nucleiques, et leurs utilisations.

L12 ANSWER 12 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002070647 PCTFULL ED 20020926 EW 200237
TITLE (ENGLISH): DENATURAT STABLE AND/OR PROTEASE RESISTANT, CHAPERONE-LIKE OLIGOMERIC PROTEINS, POLYNUCLEOTIDES ENCODING SAME AND THEIR USES
TITLE (FRENCH): PROTEINES OLIGOMERES SEMBLABLES A UNE CHAPERONE, STABLES FACE AUX DENATURANTS ET/OU RESISTANT A LA PROTEASE, POLYNUCLEOTIDES CODANT LES MEMES PROTEINES ET UTILISATIONS CORRESPONDANTES
INVENTOR(S): WANG, Wangxia; PELAH, Dan; ALEGRAND, Tal; SHOSEYOV, Oded; ALTMAN, Arie
PATENT ASSIGNEE(S): YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM, for all designates States

except US; WANG, Wangxia, for US only; PELAH, Dan, for US only; ALEGRAND, Tal, for US only; SHOSEYOV, Oded, for US only; ALTMAN, Arie, for US only

AGENT: G. E. EHRLICH (1995) LTD.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002070647 | A2 | 20020912 |

DESIGNATED STATES: AE AG AL AM AT AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ CZ DE DE DK DK DM DZ EC EE EE ES FI FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-IL174 A 20020305
PRIORITY INFO.: US 2001-60/272,771 20010305

ABEN Novel denaturant-stable, protease resistant, homo-oligomeric proteins, also referred to herein as stable proteins (SPs), having chaperone-like activity; methods of production and purification of SPs; nucleic acids encoding SPs; methods of isolating nucleic acids encoding SPs; antibodies recognizing SPs; the use of SPs for stabilizing, refolding, repairing, preventing aggregation and de-aggregating macromolecules such as proteins; fusion proteins including SPs; nucleic acid constructs encoding the fusion proteins; and their uses in a variety of methods and applications.

ABFR L'invention se rapporte a de nouvelles proteines homo-oligomeriques, resistant a la protease et stables face aux denaturants, egalement appelees proteines stables (SP) et dont l'activite est semblable a celle de la chaperone ; a des procedes de fabrication et de purification des SP ; a des acides nucleiques codant les SP ; a des procedes d'isolation d'acides nucleiques codant les SP ; a des anticorps reconnaissant les SP ; a l'utilisation de SP afin de stabiliser, replier, reparer empecher l'agregation et la desagregation de macromolecules telles que les proteines ; a des proteines de fusion comprenant les SP ; a des constructions d'acide nucleique codant les proteines de fusion ; et a leur utilisation dans differents procedes et differentes applications.

L12 ANSWER 13 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002062959 PCTFULL ED 20020827 EW 200233
TITLE (ENGLISH): HEPATITIS B VIRUS TREATMENT
TITLE (FRENCH): TRAITEMENT DU VIRUS DE L'HEPATITE B
INVENTOR(S): MIZZEN, Lee; LIU, Hongwei; SIEGEL, Marvin
PATENT ASSIGNEE(S): STRESSGEN BIOTECHNOLOGIES CORP., for all designates States except US; MIZZEN, Lee, for US only; LIU, Hongwei, for US only; SIEGEL, Marvin, for US only

AGENT: FRASER, Janis, K.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002062959 | A2 | 20020815 |

DESIGNATED STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD

RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC
NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN
TD TG

APPLICATION INFO.: WO 2002-US3460 A 20020205
PRIORITY INFO.: US 2001-60/266,733 20010205

ABEN The invention relates to HBV antigen-containing compositions that are useful in treating or preventing HBV infection. The content of the compositions can vary, as described herein, but the compositions comprise a stress protein, or a portion (e.g., a fragment) or derivative thereof, and an HBV antigen.

ABFR L'invention concerne des compositions contenant un antigene du virus de l'hepatite B (HBV) utilisees pour traiter ou prevenir une infection induite par le HBV. Le contenu des compositions peut varier, et ces compositions comprennent une proteine de stress, ou une partie (par exemple, un fragment) ou un derive de celle-ci, et un antigene contre le HBV.

L12 ANSWER 14 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002057796 PCTFULL ED 20020801 EW 200230
TITLE (ENGLISH): METHOD FOR IDENTIFYING COMPOUNDS TO TREAT MEDICAL PATHOLOGIES ASSOCIATED WITH MOLECULAR CRYSTALLIZATION
TITLE (FRENCH): PROCEDE D'IDENTIFICATION DE COMPOSES POUR TRAITER DES PATHOLOGIES ASSOCIEES A LA CRISTALLISATION MOLECULAIRE
INVENTOR(S): SHELL, John, W.
PATENT ASSIGNEE(S): SHELL, John, W.
AGENT: REED, Dianne, E.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002057796 | A2 | 20020725 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-US1952 A 20020118
PRIORITY INFO.: US 2001-60/262,987 20010118
US 2002-60/262,987 20020117

ABEN Numerous diseases and disorders are caused or exacerbated by the formation of crystalline aggregates of a biomolecule that is normally in solution. Such diseases and disorders include cataracts, sickle cell anemia, atherosclerosis, kidney stones, gallstones, gout, and Alzheimer's disease. The present invention provides methods to identify compounds that can inhibit the adverse formation of crystalline aggregates, including fibrils, of a target biomolecule. These methods include the screening of large combinatorial libraries. The identified compounds are tested for their therapeutic utility in treating medical conditions caused or exacerbated by the adverse crystallization of biomolecules. Molecules that are slight modifications of the target biomolecule are found to be particularly effective in inhibiting the adverse crystallization, including fibril formation, of a target biomolecule.

ABFR De nombreuses maladies et troubles sont dus ou sont exacerbes par la formation d'agregats cristallins d'une biomolecule se trouvant normalement en solution. Ces maladies et troubles sont la cataracte, la drepanocytose, les calculs renaux, les calculs biliaires, la goutte et la maladie d'Alzheimer. Cette invention porte sur des procedes d'identification de composes qui peuvent inhiber la formation

indesirable d'agregats cristallins, tels que des fibrilles, d'une biomolecule cible. Ces procedes consistent a cribler de grandes bibliotheques combinatoires. Puis on teste les composes identifies en vue de determiner leur utilite dans le traitement d'etats pathologiques dus ou exacerbes par la cristallisation indesirable de biomolecules. Les molecules qui sont de legeres modifications de la biomolecule cible s'averent etre particulierement efficaces dans l'inhibition de la cristallisation indesirable, telle que la formation de fibrilles, d'une biomolecule cible.

L12 ANSWER 15 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002048190 PCTFULL ED 20020709 EW 200225
TITLE (ENGLISH): USE OF L-CARNITINE AS STABILIZING AGENT OF PROTEINS
TITLE (FRENCH): UTILISATION DE L-CARNITINE EN TANT QU'AGENT DE STABILISATION DE PROTEINES
INVENTOR(S): CALVANI, Menotti
PATENT ASSIGNEE(S): SIGMA-TAU INDUSTRIE FARMACEUTICHE RIUNITE S.P.A., for all designates States except US; CALVANI, Menotti, for US only
AGENT: SPADARO, Marco
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002048190 | A1 | 20020620 |

DESIGNATED STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-IT520 A 20001215

ABEN The present invention relates to the technical field of stabilizing proteins, in particular to the therapeutic aspects of protein stabilization. L-carnitine is a useful agent for stabilizing proteins, and in a particularly favourable aspect in proteins used in the medical field. In a preferred aspect, L-carnitine is used for protecting chaperone activity, and in the medical field for preserving the activity of altered chaperone proteins. In connection with this invention L-carnitine is used for the preparation of a medicament for the treatment of diseases due to altered chaperone proteins, such as eye diseases, in particular cataract.

ABFR La presente invention concerne le domaine technique de la stabilisation de proteines, notamment les aspects therapeutiques de la stabilisation proteique. La L-carnitine est un agent d'utilite en ce qui concerne la stabilisation de proteines, particulierement en ce qui concerne les proteines utilisees dans le domaine medical. Dans un aspect prefere de l'invention, la L-carnitine est utilisee pour preserver l'activite de la chaperone, et dans le domaine medical pour preserver l'activite de proteines chaperone modifiees. Selon l'invention, la L-carnitine est utilisee pour la preparation d'un medicament servant a traiter des troubles lies aux proteines chaperone modifiees, telles que des troubles oculaires, notamment la cataracte.

L12 ANSWER 16 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002040719 PCTFULL ED 20020610 EW 200221
TITLE (ENGLISH): RETINOID PATHWAY ASSAYS, AND COMPOSITIONS THEREFROM
TITLE (FRENCH): DOSAGES DE VOIES DU RETINOIDE, ET COMPOSITIONS CORRESPONDANTES
INVENTOR(S): KAMB, Carl, Alexander; RICHARDS, Burt, Timothy; KARPILOW, Jon

PATENT ASSIGNEE(S): DELTAGEN PROTEOMICS, INC., for all designates States except US; KAMB, Carl, Alexander, for US only; RICHARDS, Burt, Timothy, for US only; KARPILOW, Jon, for US only
AGENT: WILLIAMS, Joseph, A., Jr.
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002040719 | A2 | 20020523 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2001-US44039 A 20011117
PRIORITY INFO.: US 2000-60/249,468 20001117

ABEN Methods for assaying a cellular pathway, and more particularly a retinoic acid-related pathway, are disclosed. The assays of the invention utilize particular host cells with desired retinoic acid pathway elements, and results in the identification of bilogically active phenotypic probes and cellular targets and fragments, variants and mimetics thereof.

ABFR L'invention concerne des methodes de dosage d'une voie cellulaire, et plus specifiquement, d'une voie afferente a l'acide retinoique. Les dosages de cette invention utilisent des cellules hotes specifiques avec des elements de voies d'acide retinoique, ainsi que des resultats d'identification des sonde phenotypiques actives biologiquement et de fragments et cibles cellulaires, des variants et des substances mimetiques correspondantes.

L12 ANSWER 17 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2002000242 PCTFULL ED 20020814
TITLE (ENGLISH): HUMAN PAPILLOMA VIRUS TREATMENT
TITLE (FRENCH): TRAITEMENT DES INFECTIONS PAR LE PAPILLOMAVIRUS
INVENTOR(S): NEEFE, John; GOLDSTONE, Stephen; WINNETT, Mark; SIEGEL, Marvin
PATENT ASSIGNEE(S): STESSGEN BIOTECHNOLOGIES CORPORATION; NEEFE, John; GOLDSTONE, Stephen; WINNETT, Mark; SIEGEL, Marvin
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002000242 | A2 | 20020103 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2001-US20240 A 20010626
PRIORITY INFO.: US 2000-60/214,202 20000626

ABEN Disclosed is a method of treating a wart in a subject by administering to the subject a composition containing (1) a heat shock protein or an immunostimulatory fragment thereof, and (2) a protein of a human

papilloma virus or an antigenic fragment thereof. Also disclosed is a method of treating a human papilloma virus infection in a subject infected or suspected of being infected with a human papilloma virus of a first type by administering to the subject a composition containing (1) a heat shock protein or an antigenic fragment thereof, and (2) a protein of a human papilloma virus of a second type or an antigenic fragment thereof, where the first type and second type are different.

ABFR L'invention se rapporte a une methode de traitement d'une verrue qui consiste a administrer au sujet presentant ladite verrue une composition contenant (1) une proteine de stress ou un fragment immunostimulateur d'une telle proteine, et (2) une proteine d'un papillomavirus ou un fragment antigenique dudit virus. L'invention se rapporte egalement a une methode de traitement d'une infection par papillomavirus chez un sujet infecte ou susceptible d'etre infecte par un papillomavirus d'un premier type, ledit procede consistant a administrer au sujet en question une composition contenant une proteine de stress ou un fragment antigenique d'une telle proteine et (2) une proteine d'un papillomavirus d'un second type ou un fragment antigenique d'une telle proteine, lesdits premier et second type de papillomavirus etant differents.

L12 ANSWER 18 OF 46 WPIDS (C) 2002 THOMSON DERWENT DUPLICATE 2
ACCESSION NUMBER: 2002-011413 [01] WPIDS
DOC. NO. CPI: C2002-002972
TITLE: Improving stability and/or solubility of proteins expressed in vivo or in vitro.
DERWENT CLASS: B04 D16
INVENTOR(S): SANDERS, M C
PATENT ASSIGNEE(S): (EXPR-N) EXPRESSIVE CONSTRUCTS INC; (SAND-I) SANDERS M C
COUNTRY COUNT: 95
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|---|---|---|---|---|
| WO 2001083804 | A2 | 20011108 | (200201)* | EN | 23 |

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2001061242 A 20011112 (200222)
US 2002142384 A1 20021003 (200267)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---|---|---|---|
| WO 2001083804 | A2 | WO 2001-US14692 | 20010503 |
| AU 2001061242 | A | AU 2001-61242 | 20010503 |
| US 2002142384 | A1 Provisional | US 2000-201407P | 20000503 |
| | | US 2001-848780 | 20010503 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---|---|---|
| AU 2001061242 | A Based on | WO 200183804 |

PRIORITY APPLN. INFO: US 2000-201407P 20000503; US 2001-848780 20010503
AN 2002-011413 [01] WPIDS
AB WO 200183804 A UPAB: 20020105
NOVELTY - Methods for improving protein stability and/or solubility, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the

following:
(1) a method (I) for producing a **soluble** and active recombinant protein comprising:
(a) inserting the p26 betas-core domain into a vector;
(b) inserting the insoluble protein domain into the vector directly after the p26 domain;
(c) inserting the vector into bacterial cells;
(d) growing the bacteria in a culture to an optical density (OD) of 0.8-1.0; and
(e) inducing the culture with IPTG;
(2) a method (II) for preventing unwanted **proteolysis** of a recombinant protein comprising:
(A) inserting bovine **alpha-crystallin** into a vector;
(B) inserting the protein of interest into a vector; and
(C) steps (c) to (e) from (I);
(3) a method for purifying native bovine **alpha-crystallin** protein comprising:
(a) homogenizing bovine eye lenses in a buffer;
(b) binding **alpha-crystallin** protein to a Q column;
(c) eluting the **alpha-crystallin** with a high salt; and
(d) separating the protein in 100 mM Glycine pH 2.5 on a Macroprep (RTM) column;
(4) a method of purifying recombinant **alpha-crystallin** type HIS-tagged proteins comprising:
(a) inserting the **alpha-crystallin** protein domain into a vector with the hexa-his tag;
(b) inserting the vector into bacterial cells and growing/inducing the cells;
(c) lyzing the cells and centrifuging out cell debris; and
(d) purifying the **alpha-crystallin** protein using an Ni-NTA column; and
(5) a method (V) for protecting a protein from **proteolysis** during purification, comprising:
(A) coupling purified bovine **alpha-crystallin** protein to a chromatography resin (CNBr-activated Sepharose (RTM) 4B or NHS-activated Sepharose 4B);
(B) rinsing and blocking the resin with BSA; and
(C) using the resin to purify the protein of choice.
USE - The methods are used to improve protein stability, folding and/or solubility when produced either in vivo or in vitro.
Dwg.0/7

L12 ANSWER 19 OF 46 USPATFULL

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2001:220852 USPATFULL | | | |
| TITLE: | Chimeric DNA-binding proteins | | | |
| INVENTOR(S): | Pomerantz, Joel L., Cambridge, MA, United States<br>Sharp, Phillip A., Newton, MA, United States<br>Pabo, Carl O., Newton, MA, United States | | | |
| PATENT ASSIGNEE(S): | Massachusetts Institute of Technology, Cambridge, MA, United States (U.S. corporation) | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 6326166 | B1 | 20011204 | |
| | WO 9620951 | | 19960711 | |
| APPLICATION INFO.: | US 1998-973131 | | 19980316 | (8) |
| | WO 1995-US16982 | | 19951229 | |
| | | | 19980316 | PCT 371 date |
| | | | 19980316 | PCT 102(e) date |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | GRANTED | | | |
| PRIMARY EXAMINER: | Martinell, James | | | |

LEGAL REPRESENTATIVE: Vincent, Matthew P.Ropes & Gray, LLP
NUMBER OF CLAIMS: 60
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 2890
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chineric proteins containing composite DNA-binding regions are disclosed together with DNA constructs encoding them, compositions containing them and applications in which they are useful.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 20 OF 46 USPATFULL
ACCESSION NUMBER: 2001:202601 USPATFULL
TITLE: Regulated apoptosis
INVENTOR(S): Crabtree, Gerald, Woodside, CA, United States
Schreiber, Stuart, Boston, MA, United States
Spencer, David, Houston, TX, United States
Wandless, Thomas, Palo Alto, CA, United States
Belshaw, Peter, Somerville, MA, United States
Ho, Steffan N, San Diego, CA, United States
PATENT ASSIGNEE(S): Board of Trustees of Leland Stanford Junior University, Stanford, CA, United States (U.S. corporation)
President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6316418 | B1 | 20011113 |
| APPLICATION INFO.: | US 1999-302629 | | 19990430 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-87811, filed on 29 May 1998, now patented, Pat. No. US 6054436 Continuation of Ser. No. US 1994-292597, filed on 18 Aug 1994, now patented, Pat. No. US 5834266 Continuation-in-part of Ser. No. US 1994-179143, filed on 7 Jan 1994, now abandoned Continuation-in-part of Ser. No. US 1993-93499, filed on 16 Jul 1993, now abandoned , said Ser. No. US 179143 And Ser. No. US 302629 Continuation-in-part of Ser. No. US 1994-196043, filed on 11 Feb 1994, now abandoned Continuation-in-part of Ser. No. US 1994-179748, filed on 7 Jan 1994, now abandoned Continuation-in-part of Ser. No. US 1993-92977, filed on 16 Jul 1993, now abandoned Continuation-in-part of Ser. No. US 1993-17931, filed on 12 Feb 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Schwartzman, Robert A.
LEGAL REPRESENTATIVE: Vincent, Matthew P.Ropes & Gray
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 35 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 4291
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB We have developed a general procedure for the regulated (inducible) dimerization or oligomerization of intracellular proteins and disclose methods and materials for using that procedure to regulatably initiate cell-specific apoptosis (programmed cell death) in genetically engineered cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 21 OF 46 USPATFULL
ACCESSION NUMBER: 2001:185087 USPATFULL
TITLE: Heterologous transcription factors

INVENTOR(S): Gilman, Michael Z., Newton, MA, United States
Natesan, Sridaran, Chestnut Hill, MA, United States
PATENT ASSIGNEE(S): ARIAD Gene Therapeutics, Inc., Cambridge, MA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 6306649 | B1 | 20011023 | |
| APPLICATION INFO.: | US 1996-672213 | | 19960627 | (8) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1995-553P | 19950627 (60) |
| | US 1995-19614P | 19951229 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Martin, Jill D.
LEGAL REPRESENTATIVE: Berstein, David L.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 2484
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides novel materials and methods involving the heterologous expression of transcription factors which are useful for effecting transcription of target genes in genetically engineered cells or organisms containing them. Target gene constructs and other materials useful for practicing the invention are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 22 OF 46 USPATFULL
ACCESSION NUMBER: 2001:86035 USPATFULL
TITLE: Early detection of mycobacterial disease
INVENTOR(S): Laal, Suman, Croton-on-Hudson, NY, United States
Zolla-Pazner, Susan, New York, NY, United States
Belisle, John T., Fort Collins, CO, United States
PATENT ASSIGNEE(S): New York Univ. Medical Center, New York, NY, United States (U.S. corporation)
Colorado State University, Ft. Collins, CO, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 6245331 | B1 | 20010612 | |
| APPLICATION INFO.: | US 1997-1984 | | 19971231 | (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-34003P | 19970102 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Swartz, Rodney P.
LEGAL REPRESENTATIVE: Venable, Livnat, Shmuel
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 51 Drawing Figure(s); 32 Drawing Page(s)
LINE COUNT: 4630
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A number of protein and glycoprotein antigens secreted by Mycobacterium. tuberculosis (Mt) have been identified as "early" Mt antigens on the basis early antibodies present in subjects infected with Mt prior to the development of detectable clinical disease. These early Mt antigens, in particular an 88 kDa secreted protein having a pI of about 5.2 present in Mt lipoarabinomannan-free culture filtrate, a protein characterized

as Mt antigen 85C; a protein characterized as Mt antigen MPT51, a glycoprotein characterized as Mt antigen MPT32; and a 49 kDa protein having a pI of about 5.1, are useful in immunoassay methods for early, rapid detection of TB in a subject. Also provided are antigenic compositions, kits and methods to useful for detecting an early Mt antigen, an early Mt antibody, and immune complexes thereof. For the first time, a surrogate marker is available for inexpensive screening of individuals at heightened risk for developing TB, in particular HIV-1 infected subjects and other immunocompromised individuals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 23 OF 46 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 2001:18213 USPATFULL |
| TITLE: | Synthetic transcriptional modulators and uses thereof |
| INVENTOR(S): | Verdine, Gregory L., Lexington, MA, United States<br>Nyanguile, Origene, Gaithersburg, MD, United States |
| PATENT ASSIGNEE(S): | President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6183965 | B1 | 20010206 |
| APPLICATION INFO.: | US 1998-208057 | | 19981209 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1997-987912, filed on 9 Dec 1997 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Schwartzman, Robert A. | | |
| LEGAL REPRESENTATIVE: | Foley, Hoag & Eliot, LLP, Clauss, Isabelle M., Vincent, Matthew P. | | |
| NUMBER OF CLAIMS: | 35 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 11 Drawing Figure(s); 7 Drawing Page(s) | | |
| LINE COUNT: | 3213 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 24 OF 46 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 2001:4472 USPATFULL |
| TITLE: | P53-regulated genes |
| INVENTOR(S): | Levine, Arnold L., Princeton, NJ, United States<br>Murphy, Maureen Elizabeth, Blue Bell, PA, United States<br>Mack, David H., Menlo Park, CA, United States<br>Gish, Kurt Carlyle, Sunnyvale, CA, United States<br>Tom, Edward Yat Wah, Sacramento, CA, United States |
| PATENT ASSIGNEE(S): | Affymetrix, Inc., United States (U.S. corporation)<br>Princeton University, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6171798 | B1 | 20010109 |
| APPLICATION INFO.: | US 1999-442039 | | 19991117 (9) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1998-49025, filed on 27 Mar 1998, now patented, Pat. No. US 6020135 | | |
| DOCUMENT TYPE: | Patent | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Schwartzman, Robert A. | | |

ASSISTANT EXAMINER: Lishibuya, Mark
LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 958
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Many genes are identified as being p53-regulated which were not heretofore known to be p53-regulated. This includes both genes whose expression is induced and genes whose expression is repressed by the expression of wild-type p53. Monitoring expression of these genes is used to provide indications of p53 status in a cell. Such monitoring can also be used to screen for useful anti-cancer therapeutics, as well as for substances which are carcinogenic. Defects in p53 can be bypassed by supplying p53 induced genes to cells. Defects in p53 can also be bypassed by supplying antisense constructs to p53-repressed genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 25 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2001012659 PCTFULL ED 20020828
TITLE (ENGLISH): HUMAN DNA SEQUENCES
TITLE (FRENCH): SEQUENCE D'ADN HUMAIN
INVENTOR(S): WIEMANN, Stefan
PATENT ASSIGNEE(S): GERMAN HUMAN GENOME PROJECT; WIEMANN, Stefan
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2001012659 | A2 | 20010222 |

DESIGNATED STATES AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-IB1496 A 20000818
PRIORITY INFO.: US 1999-60/149,499 19990818
US 1999-60/156,503 19990928

ABEN Novel human cDNA sequence of a clones, the encoded protein sequence of a clones, antibodies and variants thereof, are provided. The disclosed sequence of a clones find application in a number of ways, including use in profiling assays. In this regard, various assemblages of nucleic acids or proteins are provided that are useful in providing large arrays of human material for implementing large-scale screening strategies. The disclosed sequence of a clones may also be used in formulating medicaments, treating various disorders and in certain diagnostic applications.
ABFR

L12 ANSWER 26 OF 46 USPATFULL
ACCESSION NUMBER: 2000:160780 USPATFULL
TITLE: Synthetic transcriptional modulators and uses thereof
INVENTOR(S): Verdine, Gregory L., 91 Outlook Dr., Lexington, MA, United States 02173
Nyanguile, Origene, 2517 Baltimore Rd. #4, Rockville, MD, United States 20853

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 6153383 | | 20001128 | |
| APPLICATION INFO.: | US 1997-987912 | | 19971209 | (8) |

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartzman, Robert A.
LEGAL REPRESENTATIVE: Foley, Hoag & Eliot LLP, Vincent, Matthew P., Clauss, Isabelle M.
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2897
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 27 OF 46 USPATFULL
ACCESSION NUMBER: 2000:50686 USPATFULL
TITLE: Regulated apoptosis
INVENTOR(S): Crabtree, Gerald R., Woodside, CA, United States
Schreiber, Stuart L., Cambridge, MA, United States
Spencer, David M., Los Altos, CA, United States
Wandless, Thomas J., Cambridge, MA, United States
Belshaw, Peter, Cambridge, MA, United States
PATENT ASSIGNEE(S): Board of Trustees of Leland S. Stanford Jr. Univ., Stanford, CA, United States (U.S. corporation)
President & Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6054436 | | 20000425 |
| APPLICATION INFO.: | US 1998-87811 | | 19980529 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-292597, filed on 18 Aug 1994, now patented, Pat. No. US 5834266 which is a continuation-in-part of Ser. No. US 1994-179143, filed on 7 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-93499, filed on 16 Jul 1993, now abandoned And a continuation-in-part of Ser. No. US 1994-196043, filed on 14 Feb 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-179748, filed on 7 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-92977, filed on 16 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-17931, filed on 12 Feb 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Elliott, George C.
ASSISTANT EXAMINER: Schwartzman, Robert
LEGAL REPRESENTATIVE: Berstein, David L., Hausdorff, Sharon F., Clauss, Isabelle M.
NUMBER OF CLAIMS: 64
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 35 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 5061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB We have developed a general procedure for the regulated (inducible) dimerization or oligomerization of intracellular proteins and disclose methods and materials for using that procedure to regulatably initiate cell-specific apoptosis (programmed cell death) in genetically engineered cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 28 OF 46 USPATFULL
ACCESSION NUMBER: 2000:31403 USPATFULL
TITLE: Compositions containing nucleic acids and ligands for therapeutic treatment
INVENTOR(S): Baird, J. Andrew, San Diego, CA, United States
Chandler, Lois Ann, Encinitas, CA, United States
Sosnowski, Barbara A., Coronado, CA, United States
PATENT ASSIGNEE(S): Selective Genetics, Inc., La Jolla, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6037329 | | 20000314 |
| APPLICATION INFO.: | US 1996-718904 | | 19960924 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-441979, filed on 16 May 1995, now abandoned which is a continuation-in-part of Ser. No. US 1994-213446, filed on 15 Mar 1994, now abandoned Ser. No. Ser. No. US 1994-213447, filed on 15 Mar 1994, now abandoned Ser. No. Ser. No. US 1994-297961, filed on 29 Aug 1994, now abandoned And Ser. No. US 1994-305771, filed on 13 Sep 1994, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Priebe, Scott D.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Seed and Berry LLP
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 25 Drawing Page(s)
LINE COUNT: 7163
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Preparations of conjugates of a receptor-binding internalized ligand and a cytocide-encoding agent and compositions containing such preparations are provided. The conjugates contain a polypeptide that is reactive with an FGF receptor, such as bFGF, or another heparin-binding growth factor, cytokine, or growth factor coupled to a nucleic acid binding domain. One or more linkers may be used in the conjugation. The linker is selected to increase the specificity, toxicity, solubility, serum stability, or intracellular availability, and promote nucleic acid condensation of the targeted moiety. The conjugates are complexed with a cytocide-encoding agent, such as DNA encoding saporin. Conjugates of a receptor-binding internalized ligand to a nucleic acid molecule are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 29 OF 46 USPATFULL
ACCESSION NUMBER: 2000:12598 USPATFULL
TITLE: P53-regulated genes
INVENTOR(S): Levine, Arnold J., Princeton, NJ, United States
Murphy, Maureen Elizabeth, Blue Bell, PA, United States
Mack, David H., Menlo Park, CA, United States
Gish, Kurt Carlyle, Sunnyvale, CA, United States
Tom, Edward Yat Wah, Sacramento, CA, United States
PATENT ASSIGNEE(S): Affymetrix, Inc., United States (U.S. corporation)
Princeton University, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6020135 | | 20000201 |
| APPLICATION INFO.: | US 1998-49025 | | 19980327 (9) |

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: LeGuyader, John L.
ASSISTANT EXAMINER: Shibuya, Mark L.
LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 1239
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Many genes are identified as being p53-regulated which were not heretofore known to be p53-regulated. This includes both genes whose expression is induced and genes whose expression is repressed by the expression of wild-type p53. Monitoring expression of these genes is used to provide indications of p53 status in a cell. Such monitoring can also be used to screen for useful anti-cancer therapeutics, as well as for substances which are carcinogenic. Defects in p53 can be bypassed by supplying p53 induced genes to cells. Defects in p53 can also be bypassed by supplying antisense constructs to p53-repressed genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 30 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 2000061621 PCTFULL ED 20020515
TITLE (ENGLISH): FLEA HEAD, NERVE CORD, HINDGUT AND MALPIGHIAN TUBULE NUCLEIC ACID MOLECULES, PROTEINS AND USES THEREOF
TITLE (FRENCH): MOLECULES D'ACIDES NUCLEIQUES ET PROTEINES ISSUES DE LA TETE, DE LA MOELLE EPINIERE, DE L'INTESTIN POSTERIEUR ET DU TUBE DE MALPIGHI DE PUCES ET UTILISATIONS CORRESPONDANTES
INVENTOR(S): BRANDT, Kevin, S.; GAINES, Patrick, J.; STINCHCOMB, Dan, T.; WISNEWSKI, Nancy
PATENT ASSIGNEE(S): HESKA CORPORATION
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2000061621 | A2 | 20001019 |
| DESIGNATED STATES | AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 2000-US9437 | A | 20000407 |
| PRIORITY INFO.: | US 1999-60/128,704 | | 19990409 |

ABEN The present invention relates to flea head, nerve cord, hindgut and malpighian tubule proteins;
to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that
encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised
against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that
inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention
also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory
compounds. Also included in the present invention are therapeutic compositions comprising proteins,
nucleic acid molecules, or protective compounds derived from proteins of the present invention as
well as the use of such therapeutic compositions to protect animals from

flea infestation. Also
included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule
proteins to derive inhibitory compounds.

ABFR La presente invention se rapporte a des proteines issues de la tete, de la moelle epiniere, de
l'intestin posterieur et du tube de Malpighi de puces, a des molecules d'acides nucleiques issues de
la tete, de la moelle epiniere, de l'intestin posterieur et du tube de Malpighi de puces, et
notamment des molecules d'acides nucleiques qui codent pour ces proteines de la tete, la moelle
epiniere, l'intestin posterieur et le tube de Malpighi de puces, ainsi qu'a des anticorps diriges
contre l'activite des proteines de la tete, la moelle epiniere, l'intestin posterieur et le tube de
Malpighi de puces. La presente invention se rapporte egalement a des procedes permettant de produire
ces proteines, molecules d'acides nucleiques, anticorps et composes inhibiteurs. Elle se rapporte
egalement a des compositions therapeutiques comportant des proteines, des molecules d'acides
nucleiques ou des composes protecteurs derives des proteines decrites ci-dessus ainsi qu'a
l'utilisation de ces compositions therapeutiques pour proteger des animaux contre l'infestation par
des puces. La presente invention se rapporte en outre a l'utilisation de proteines issues de la
tete, de la moelle epiniere, de l'intestin posterieur et du tube de Malpighi de puces pour produire
des composes inhibiteurs.

L12 ANSWER 31 OF 46 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 1999:155696 USPATFULL |
| TITLE: | Regulated apoptosis |
| INVENTOR(S): | Crabtree, Gerald R., Woodside, CA, United States<br>Schreiber, Stuart L., Cambridge, MA, United States<br>Spencer, David M., Los Altos, CA, United States<br>Wandless, Thomas J., Cambridge, MA, United States<br>Belshaw, Peter, Somerville, MA, United States |
| PATENT ASSIGNEE(S): | Board of Trustees of the Leland S. Stanford, Jr. Univ., Stanford, CA, United States (U.S. corporation)<br>President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5994313 | | 19991130 |
| APPLICATION INFO.: | US 1995-483898 | | 19950607 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1994-292597, filed on 18 Aug 1994, now patented, Pat. No. US 5834266 which is a continuation-in-part of Ser. No. US 1994-196043, filed on 14 Feb 1994, now abandoned And Ser. No. US 1994-179143, filed on 17 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-93499, filed on 16 Jul 1993, now abandoned , said Ser. No. US 196043 which is a continuation-in-part of Ser. No. US 1994-179748, filed on 7 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-92977, filed on 16 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-17931, filed on 12 Feb 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Elliott, George C. | | |

ASSISTANT EXAMINER: Schwartzman, Robert
LEGAL REPRESENTATIVE: Berstein, David L., Hausdorff, Sharon F., Vincent, Matthew P.
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 32 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 4791
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB We have developed a general procedure for the regulated (inducible) dimerization or oligomerization of intracellular proteins and disclose methods and materials for using that procedure to regulatably initiate cell-specific apoptosis (programmed cell death) in genetically engineered cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 32 OF 46 USPATFULL
ACCESSION NUMBER: 1999:132249 USPATFULL
TITLE: Healthy foods and cosmetics
INVENTOR(S): Yamaguchi, Fumio, Noda, Japan
Saito, Makoto, Noda, Japan
Ishikawa, Hiroharu, Noda, Japan
Kataoka, Shigehiro, Noda, Japan
Ariga, Toshiaki, Noda, Japan
PATENT ASSIGNEE(S): Kikkoman Corporation, Japan (non-U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5972357 | | 19991026 | |
| APPLICATION INFO.: | US 1997-975713 | | 19971121 | (8) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | JP 1996-353869 | 19961219 |
| | JP 1997-199119 | 19970710 |
| | JP 1997-199120 | 19970710 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Clardy, S. Mark
ASSISTANT EXAMINER: Williamson, Michael A.
LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 856
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to healthy foods and cosmetics. More particularly, it relates to healthy foods and cosmetics containing a polyisoprenylated benzophenone derivatives as effective ingredients and having a variety of functions for maintaining health such as anti-ulcer activity, the Maillard reaction inhibiting activity, anti-oxidation activity, reactive oxygen species scavenging activity, and anti-tumor promotion activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 33 OF 46 PCTFULL COPYRIGHT 2002 Univentio
ACCESSION NUMBER: 1999030164 PCTFULL ED 20020515
TITLE (ENGLISH): METHOD TO IDENTIFY TRANSCRIPTIONAL MODULATORS
TITLE (FRENCH): PROCEDE D'IDENTIFICATION DE MODULATEURS DE TRANSCRIPTION
INVENTOR(S): VERDINE, Gregory, L.; NYANGUILE, Origene
PATENT ASSIGNEE(S): PRESIDENT AND FELLOWS OF HARVARD COLLEGE
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 9930164 | A1 | 19990617 |
| DESIGNATED STATES | AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE | | |
| APPLICATION INFO.: | WO 1998-US26101 | A | 19981209 |
| PRIORITY INFO.: | US 1997-08/987,912 | | 19971209 |

ABEN Novel synthetic transcriptional modulators having at least one selected ligand linked to at least one transcriptional modulating portion are described. The transcriptional modulators of the present invention can include a ligand linked to a chemical moiety. These transcriptional modulators can be used to selectively control gene expression and to identify components of the transcriptional machinery.

ABFR L'invention porte sur de nouveaux modulateurs de transcription de synthese presentant au moins un ligand selectionne lie a au moins une portion modulant la transcription. Lesdits modulateurs, qui peuvent comporter un ligand lie a un fragment chimique, peuvent servir a reguler selectivement l'expression de genes et a identifier certains composants du mecanisme de transcription.

L12 ANSWER 34 OF 46 PCTFULL COPYRIGHT 2002 Univentio

ACCESSION NUMBER: 1999007860 PCTFULL ED 20020515

TITLE (ENGLISH): IMMUNE RESPONSES AGAINST HPV ANTIGENS ELICITED BY COMPOSITIONS COMPRISING AN HPV ANTIGEN AND A STRESS PROTEIN OR AN EXPRESSION VECTOR CAPABLE OF EXPRESSION OF THESE PROTEINS

TITLE (FRENCH): REPONSES IMMUNITAIRES CONTRE LES ANTIGENES DU VPH ET DECLENCHEES PAR DES COMPOSITIONS COMPRENANT UN ANTIGENE DU VPH, ET PROTEINE DU STRESS OU VECTEUR D'EXPRESSION CAPABLE D'EXPRIMER CES PROTEINES

INVENTOR(S): MIZZEN, Lee; CHU, Randall

PATENT ASSIGNEE(S): STRESSGEN BIOTECHNOLOGIES CORPORATION; MIZZEN, Lee; CHU, Randall

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 9907860 | A1 | 19990218 |
| DESIGNATED STATES | AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG | | |
| APPLICATION INFO.: | WO 1998-CA246 | A | 19980320 |
| PRIORITY INFO.: | US 1997-60/054,835 | | 19970805 |

ABEN The present invention relates to compositions for inducing an immune response, preferably a cellular, in particular a cell-mediated, cytolytic immune response, to human papillomavirus (HPV) protein antigens displayed by HPV or exhibited by infected cells including cells from cervical and other tumors. In one embodiment, compositions comprise an HPV protein antigen joined to a stress protein (or heat shock protein (Hsp)). The HPV protein antigen may be joined to the stress protein by chemical conjugation or noncovalently using linking moieties, or the HPV protein antigen and the

stress protein may be joined in a fusion protein containing both HPV protein antigen and stress protein sequences. In another embodiment, compositions comprise an expression vector including, in expressible form, sequences encoding the HPV protein antigen and sequences encoding the stress protein. The expression vector can be introduced into cells of a subject, or it can be used to transduce cells of the subject i(ex vivo), resulting in the expression of an HPV protein antigen-stress protein fusion protein that will stimulate the subject's immune response to the HPV protein antigen. The present invention also relates to compositions comprising a stress protein linked to an HPV antigen and another pharmacologically acceptable component, to stress protein-HPV protein antigen fusions and conjugates and to expression vectors encoding and capable of directing the expression in a subject's cells of a fusion protein comprising a stress protein and an HPV protein antigen sequence. The present invention also relates to uses of these compositions to induce immune responses against HPV and HPV protein antigen-exhibiting cells including HPV-associated tumors.

ABFR La presente invention concerne des compositions permettant d'induire une reponse immunitaire, de preference une reponse immunitaire cellulaire de type II, et plus particulierement a mediation cellulaire, contre les antigenes du Virus des Papillomes Humains (VPH) que montre le VPH, ou que montrent des cellules infectees des tumeurs du col de l'uterus et d'autres tumeurs. Une realisation de l'invention porte sur des compositions comprenant une proteine antigene du VPH jointe a une proteine du stress (Hsp). L'antigene du VPH peut etre joint a une proteine du stress par conjugaison chimique ou par non-covalence en utilisant des groupes fonctionnels de liaison. Mais l'antigene du VPH peut egalement etre joint dans une proteine hybride contenant d'une part l'antigene du VPH, et d'autre part des sequences de proteine du stress. Une autre realisation porte sur des compositions comprenant un vecteur d'expression incluant, sous forme exprimable, des sequences codant pour l'antigene du VPH et des sequences codant pour la proteine du stress. Le vecteur d'expression peut etre introduit dans les cellules d'un sujet. Mais il peut egalement servir a la transduction de cellules du sujet i(ex vivo), ce qui aboutit a l'expression d'une proteine hybride proteine du stress - antigene du VPH qui doit normalement stimuler la reponse immunitaire du sujet a l'antigene du VPH. L'invention concerne egalement, non seulement des compositions comprenant une proteine du stress liee a un antigene du VPH et un autre composant pharmacologiquement acceptable, mais aussi des hybrides et des conjugues proteine du stress - antigene du VPH, et enfin des vecteurs d'expression codant pour et capable de diriger l'expression dans les cellules d'un sujet dans le cas d'une proteine hybride comprenant une proteine du stress et une sequence antigene du VPH.
L'invention concerne enfin l'utilisation de ces compositions pour induire les reponses immunitaires

contre le VPH et des cellules montrant l'antigene VPH, y compris les tumeurs liees au VPH.

L12 ANSWER 35 OF 46 USPATFULL

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|---|---|
| ACCESSION NUMBER: | 1998:138709 USPATFULL |
| TITLE: | Regulated apoptosis |
| INVENTOR(S): | Crabtree, Gerald R., Woodside, CA, United States<br>Schreiber, Stuart L., Cambridge, MA, United States<br>Spencer, David M., Los Altos, CA, United States<br>Wandless, Thomas J., Cambridge, MA, United States<br>Belshaw, Peter, Somerville, MA, United States |
| PATENT ASSIGNEE(S): | President & Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)<br>Board of Trustees of Leland Stanford Jr. University, Stanford, CA, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5834266 | | 19981110 |
| APPLICATION INFO.: | US 1994-292597 | | 19940818 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-179143, filed on 7 Jan 1994, now abandoned And Ser. No. US 1994-179748, filed on 7 Jan 1994 which is a continuation-in-part of Ser. No. US 1993-92977, filed on 16 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-17931, filed on 12 Feb 1993, now abandoned , said Ser. No. US 179143 which is a continuation-in-part of Ser. No. US 1993-93499, filed on 16 Jul 1993

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|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Elliott, George C. |
| ASSISTANT EXAMINER: | Schwartzman, Robert |
| LEGAL REPRESENTATIVE: | Vincent, Matthew P., Clauss, Isabelle M.Foley, Hoag & Eliot LLP |
| NUMBER OF CLAIMS: | 235 |
| EXEMPLARY CLAIM: | 118 |
| NUMBER OF DRAWINGS: | 35 Drawing Figure(s); 34 Drawing Page(s) |
| LINE COUNT: | 5299 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB We have developed a general procedure for the regulated (inducible) dimerization or oligomerization of intracellular proteins and disclose methods and materials for using that procedure to regulatably initiate cell-specific apoptosis (programmed cell death) in genetically engineered cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 36 OF 46 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 1998:108251 USPATFULL |
| TITLE: | Recombinant production of proteins using 7B2 protein |
| INVENTOR(S): | Martens, Gerardus Julianus Maria, Nijmegen, Netherlands<br>Chaudhuri, Bhabatosh, Munchenstein, Switzerland<br>Stephan, Christine, Kingersheim, France |
| PATENT ASSIGNEE(S): | Novartis Corporation, Summit, NJ, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5804417 | | 19980908 |
| APPLICATION INFO.: | US 1996-709915 | | 19960909 (8) |

RELATED APPLN. INFO.: Division of Ser. No. US 1994-244492, filed on 2 Sep 1994, now patented, Pat. No. US 5708140

NUMBER DATE

| | | |
|---|---|---|
| PRIORITY INFORMATION: | NL 1991-2009 | 19911129 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Hendricks, Keith D. | |
| LEGAL REPRESENTATIVE: | Nowak, Henry P. | |
| NUMBER OF CLAIMS: | 19 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 2 Drawing Figure(s); 2 Drawing Page(s) | |
| LINE COUNT: | 1515 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention lies in the field of genetic engineering and, in particular, is concerned with the use of 7B2 as chaperone in vivo or in vitro. The invention accordingly concerns a method for producing a desired protein in vivo with the aid of recombinant cells capable of expressing 7B2 and of expressing and secreting said desired protein. Another aspect is accordingly an in vitro method for the deaggregation or prevention of aggregation of protein by treating the protein with 7B2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 37 OF 46 USPATFULL

| | | |
|---|---|---|
| ACCESSION NUMBER: | 1998:85942 USPATFULL | |
| TITLE: | Microparticles for delivery of nucleic acid | |
| INVENTOR(S): | Hedley, Mary Lynne, Belmont, MA, United States<br>Curley, Joanne M., San Mateo, CA, United States<br>Langer, Robert S., Newton, MA, United States | |
| PATENT ASSIGNEE(S): | Pangaea Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation) | |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5783567 | | 19980721 |
| APPLICATION INFO.: | US 1997-787547 | | 19970122 (8) |

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| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Degen, Nancy |
| ASSISTANT EXAMINER: | Brusca, John S. |
| LEGAL REPRESENTATIVE: | Fish & Richardson P.C. |
| NUMBER OF CLAIMS: | 32 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 13 Drawing Figure(s); 9 Drawing Page(s) |
| LINE COUNT: | 1732 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a preparation of microparticles made up of a polymeric matrix and a nucleic acid expression vector. The polymeric matrix includes one or more synthetic polymers having a solubility in water of less than about 1 mg/l. At least 90% of the microparticles have a diameter less than about 100 microns. The nucleic acid is either RNA, at least 50% of which is in the form of closed circles, or circular DNA plasmid molecules, at least 50% of which are supercoiled.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 38 OF 46 USPATFULL

| | | |
|---|---|---|
| ACCESSION NUMBER: | 1998:4738 USPATFULL | |
| TITLE: | Production of proteins using 7B2 protein | |
| INVENTOR(S): | Martens, Gerardus Julianus Maria, Nijmegen, Netherlands<br>Chaudhuri, Bhabatosh, Munchenstein, Switzerland<br>Stephan, Christine, Kingersheim, France | |
| PATENT ASSIGNEE(S): | Ciba-Geigy Corporation, Summit, NJ, United States (U.S. corporation) | |

| | NUMBER | KIND | DATE |
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| PATENT INFORMATION: | US 5708140 | 19980113 | |
| | WO 9311248 | 19930610 | |
| APPLICATION INFO.: | US 1994-244492 | 19940902 | (8) |
| | WO 1992-EP2740 | 19921127 | |
| | | 19940902 | PCT 371 date |
| | | 19940902 | PCT 102(e) date |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | NL 1991-2009 | 19911129 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hendricks, Keith D.
LEGAL REPRESENTATIVE: Nowak, Henry P., Spruill, W. Murray
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1533
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention lies in the field of genetic engineering and, in particular, is concerned with the use of 7B2 as chaperone in vivo or in vitro. The invention accordingly concerns a method for producing a desired protein in vivo with the aid of recombinant cells capable of expressing 7B2 and of expressing and secreting said desired protein. Another aspect is accordingly an in vitro method for the deaggregation or prevention of aggregation of protein by treating the protein with 7B2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 39 OF 46 USPATFULL
ACCESSION NUMBER: 97:71170 USPATFULL
TITLE: DNA encoding macrophage migration inhibition factor from ocular lens
INVENTOR(S): Wistow, Graeme John, Silver Spring, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5656737 | | 19970812 | |
| APPLICATION INFO.: | US 1994-202486 | | 19940228 | (8) |

RELATED APPLN. INFO.: Division of Ser. No. US 1991-691191, filed on 26 Apr 1991, now patented, Pat. No. US 5328990
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Walsh, Stephen
ASSISTANT EXAMINER: Spector, Lorraine
LEGAL REPRESENTATIVE: Birch, Stewart, Kolasch & Birch, LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 470
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Macrophage Migration Inhibition Factor (MIF) can be obtained from ocular lens of various birds and mammals. The amino acid sequences of lens MIF from mice, chickens and humans has been determined and the corresponding cDNA has been cloned.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 40 OF 46 USPATFULL
ACCESSION NUMBER: 95:43178 USPATFULL
TITLE: Cholera toxin gene regulated by tissue-specific

promoters
INVENTOR(S): Burton, Frank H., San Diego, CA, United States
Sutcliffe, J. Gregor, Cardiff, CA, United States
PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5416017 | | 19950516 |
| APPLICATION INFO.: | US 1993-37013 | | 19930325 (8) |

DISCLAIMER DATE: 20100629
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-528852, filed on 18 May 1990, now patented, Pat. No. US 5233610
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Carter, Philip W.
LEGAL REPRESENTATIVE: Logan, April C.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 2429
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention contemplates a method of physiologic engineering by genetically altering second messenger levels in cells. This method allows the hyperactivation or inhibition of cell function within cells, tissues and animals by introducing a foreign gene that alters a second messenger system. The use of physiologically engineered animals as systems for determining the effectiveness of therapeutic compositions is also contemplated.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 41 OF 46 USPATFULL
ACCESSION NUMBER: 95:7820 USPATFULL
TITLE: Ubiquitin carrier enzyme E2-F1, purification, production, and use
INVENTOR(S): Ciechanover, Aaron J., Haifa, Israel
Blumenfeld, Nava, Haifa, Israel
Gonen, Hedva, Haifa, Israel
PATENT ASSIGNEE(S): Rappaport Family Institute for Research in the Medical Sciences, Haifa, Israel (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5384255 | | 19950124 |
| APPLICATION INFO.: | US 1993-80073 | | 19930621 (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Prouty, Rebecca
LEGAL REPRESENTATIVE: Sterne, Kessler Goldstein & Fox
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for isolating and purifying novel species of E2 ubiquitin-carrier protein, designated E2-F1, is disclosed. A method for preparing enzymatically active fragments of E2-F1 enzyme is also disclosed. The use of purified E2-F1 to produce antibodies is also disclosed. The use of such E2-F1-specific antibodies to detect the presence of E2-F1 in a biological sample, and to inhibit protein **degradation** are also disclosed. Recombinant DNA molecules which code for E2-F1, and recombinant hosts and vectors which contain E2-F1

coding sequences are also disclosed. The use of such recombinant hosts and vectors to produce E2-F1 protein is also disclosed. The use of purified E2-F1 to identify and to isolate E3 enzyme is also disclosed. Methods for screening substances for the ability to inhibit E2-F1 enzyme activity are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 42 OF 46 USPATFULL

| | |
|---|---|
| ACCESSION NUMBER: | 94:60239 USPATFULL |
| TITLE: | Isolation of macrophage migration inhibition factor from ocular lens |
| INVENTOR(S): | Wistow, Graeme J., Silver Spring, MD, United States |
| PATENT ASSIGNEE(S): | The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government) |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5328990 | | 19940712 | |
| APPLICATION INFO.: | US 1991-691191 | | 19910426 | (7) |

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| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Hill, Jr., Robert J. |
| ASSISTANT EXAMINER: | Spector, L. |
| LEGAL REPRESENTATIVE: | Birch, Stewart, Kolasch & Birch |
| NUMBER OF CLAIMS: | 9 |
| EXEMPLARY CLAIM: | 1 |
| LINE COUNT: | 431 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Macrophage Migration Inhibition Factor (MIF) can be obtained from ocular lens of various birds and mammals. The amino acid sequences of lens MIF from mice, chickens and humans has been determined and the corresponding cDNA has been cloned.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 43 OF 46 USPATFULL

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|---|---|
| ACCESSION NUMBER: | 94:57739 USPATFULL |
| TITLE: | Process for synthesizing human H2-prorelaxin, human H2-relaxin and fusion proteins thereof |
| INVENTOR(S): | Hudson, Peter J., Bulleen, Australia<br>Niall, Hugh D., Elwood, Australia<br>Tregear, Geoffrey W., Hawthorn, Australia |
| PATENT ASSIGNEE(S): | Howard Florey Institute of Experimental Physiology and Medicine, Victoria, Australia (non-U.S. corporation) |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5326694 | | 19940705 | |
| APPLICATION INFO.: | US 1992-871318 | | 19920420 | (7) |
| DISCLAIMER DATE: | 20050719 | | | |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1991-665129, filed on 6 Mar 1991, now patented, Pat. No. US 5179195 which is a division of Ser. No. US 1987-21885, filed on 4 Mar 1987, now patented, Pat. No. US 5023321 which is a division of Ser. No. US 1983-560790, filed on 13 Dec 1983, now patented, Pat. No. US 4758516 | | | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

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|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Hill, Jr., Robert J. |

ASSISTANT EXAMINER: Teng, Sally P.
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes and DNA transfer vectors for the expression of human preprorelaxin; sub-units thereof, including genes and transfer vectors for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 44 OF 46 USPATFULL
ACCESSION NUMBER: 93:3675 USPATFULL
TITLE: Human relaxin polypeptides
INVENTOR(S): Hudson, Peter J., Victoria, Australia
Niall, Hugh D., Victoria, Australia
Tregear, Geoffrey W., Victoria, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology and Medicine, Melbourne, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5179195 | | 19930112 |
| APPLICATION INFO.: | US 1991-665129 | | 19910306 (7) |

RELATED APPLN. INFO.: Division of Ser. No. US 1987-21885, filed on 4 Mar 1987, now patented, Pat. No. US 5023321 which is a division of Ser. No. US 1983-560790, filed on 13 Dec 1983, now patented, Pat. No. US 4758516

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Ossanna, Nina
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 992
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genes and DNA transfer vectors for the expression of human preprorelaxin; sub-units thereof, including genes and transfer vectors for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 45 OF 46 USPATFULL
ACCESSION NUMBER: 91:46779 USPATFULL
TITLE: Molecular cloning and characterization of a further gene sequence coding for human relaxin
INVENTOR(S): Hudson, Peter J., Bulleen, Australia
Niall, High D., Elwood, Australia
Tregear, Geoffrey W., Hawthorn, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology & Medicine, Victoria, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5023321 | | 19910611 |
| APPLICATION INFO.: | US 1987-21885 | | 19870304 (7) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1983-560790, filed on 13 Dec 1983, now patented, Pat. No. US 4758516 | | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Moskowitz, Margaret
ASSISTANT EXAMINER: Ossanna, Nina
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 2
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 963
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes and DNA transfer vectors for the expression of human preprorelaxin; sub-units thereof, including genes and transfer vectors for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 46 OF 46 USPATFULL
ACCESSION NUMBER: 88:45600 USPATFULL
TITLE: Molecular cloning and characterization of a further gene sequence coding for human relaxin
INVENTOR(S): Hudson, Peter J., Bulleen, Australia
Niall, Hugh D., Elwood, Australia
Tregear, Geoffrey W., Hawthorn, Australia
PATENT ASSIGNEE(S): Howard Florey Institute of Experimental Physiology and Medicine, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4758516 | | 19880719 |
| APPLICATION INFO.: | US 1983-560790 | | 19831213 (6) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | AU 1982-7247 | 19821213 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Huleatt, Jayme A.
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak, and Seas
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1017
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes and DNA transfer vectors for the expression of human preprorelaxin; sub-units thereof, including genes and transfer vectors for expression of human prorelaxin and the individual A, B and C peptide chains thereof; and equivalents of all such genes. Methods for synthesis of the peptides involving recombinant DNA techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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